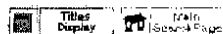


Set 2



Current Contents/Science Edition <1996 Week 01 to 2004 Week 26>

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Results available: 91

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Citation 1.

Authors

Arntz HR.

Title

Recommendations for secondary prevention after myocardial infarction [German]

Source

Zeitschrift fur Kardiologie. 93(Suppl 1):23-25, 2004.

Abstract

The new ESC guidelines for secondary prevention after STEMI recommend acetylsalicylic acid, betablockers, ACE inhibitors, statins and as a new therapeutic option 1 g n-3-fatty acids. They also advocate strict control of elevated blood pressure and plasma glucose level. To stop smoking remains obligatory, supplemented by the advice to adhere to a mediterranean diet. The clinical value of using 1 g n-3-fatty acids was shown in the GISSI-P trial and seem to reduce especially arrhythmic events. Considering the number needed to treat for the different pharmacologic therapies, betablockers and ACE inhibitors are essentials if not contraindicated, n-3-fatty acids and statins show each comparable efficacy while acetylsalicylic acid still provides a good cost/benefit relation due to its low price. [References: 7]

Publication Type

Article

Citation 2.

Authors

Schuler G.

Title

Primary prevention: Physical activity [German]

Source

Zeitschrift fur Kardiologie. 93(Suppl 2):8-15, 2004.

Abstract

Traditional risk factors such as smoking, hypertension and being overweight have received considerable attention in recent years, whereas physical activity as a preventive strategy does not enjoy the same public attention. In recent years the level of physical activity has decreased dramatically in children and adolescents in favor of time spent on the internet and in front of the TV. If this trend is allowed to develop along the same direction, a sharp increase in cardiovascular disease can be anticipated.

The protective action of physical activity on the cardiovascular system has been well documented in large numbers of patients, and the basic physiological mechanisms have been elucidated. Metabolic changes comprise loss of weight, reduction in triglyceride and LDL levels, as well as an increase in HDL. Insulin sensitivity is enhanced in all tissues postponing the manifestation of diabetes mellitus. Shear forces created by physical activity induce eNOS

within the endothelial lining of the arteries. This enzyme is responsible for controlling vasomotion through the elaboration of NO which causes vasodilation in the smooth muscle within the vessel wall. Utilization of preformed collateral vessels has been postulated repeatedly; so far, however, it only could be documented in animals, not in humans.

Nearly all studies concerned with primary prevention have shown a significant negative correlation between energy expenditure during exercise and cardiovascular mortality, even light and moderate exercise will result in a lower incidence. In order to eliminate a sedentary life style in children and adolescents, adequate programs should be initiated in all schools; they should aim for 60 min of physical activity on a daily basis. [References: 28]

Publication Type

Article

Citation 3.

Authors

Puska P. Keller I.

Title

Primary prevention of non-communicable diseases. Experiences from population based intervention in Finland for the global work of WHO [German]

Source

Zeitschrift fur Kardiologie. 93(Suppl 2):37-42, 2004.

Abstract

Globally most people die from noncommunicable diseases. Especially in developing countries noncommunicable diseases are on the rise, effecting especially poorer societal segments. The noncommunicable diseases contribute greatly to societal and economic losses and inequities in health status. The North Karelia Project was started in Finland to prevent noncommunicable diseases and with the main aim to curb the high mortality from cardiovascular diseases. In collaboration with the community, the health sector, the food industry and mass media, initiatives were started to promote a healthy diet, physical activity and reduce smoking. Over the last 25 years, the age adjusted mortality rate among men of 25-64 years of age from cardiovascular diseases fell by 73%, from lung cancer by 71% and total mortality fell 49%. Each country should plan and implement its own prevention programs, but lessons can be learned from the North Karelia Project. The paper discusses some key lessons and recommendation from the project for countries and for global work. In the last few years WHO has started to up-grade its work to fight noncommunicable diseases. Some initiatives are presented and discussed. [References: 9]

Publication Type

Article

Citation 4.

Authors

Collie CE.

Title

The health hazards of smoking

Source

West Indian Medical Journal. 53(1):1-2, 2004 Jan.

Publication Type

Editorial Material

Citation 5.**Authors**

Lwegaba A.

Title

Excess healthcare cost associated with a low smoking prevalence, Barbados

Source

West Indian Medical Journal. 53(1):12-16, 2004 Jan.

Abstract

Policy makers need justification for smoking prevention. Barbados has debated but not enacted policies on tobacco control. This study estimated tobacco-associated morbidity and hospital care costs in order to justify prevention in a developing country with a low smoking prevalence of 9%. Hospital files of patients of index diseases and other chronic diseases with recorded status of smoking were followed on their outpatient, inpatient, elective and emergency attendance up to last discharge and analyzed as a nested case-control in a cohort of smokers and non-smokers. Outcome measure was excess healthcare financial burden per person per year derived from morbidity incidence density, risk ratios, preventive fractions and excess hospital services consumed per person per year of 258 hospital patients, 84 were smokers. The mean follow up was 5.2 years. Eighty-four smokers had 463 excess outpatient appointments, 43 excess admissions, and 2651.6 excess hospital days. There were 44.8 fewer elective admissions and 62.24 more emergency admissions among smokers who suffered frequent and severer complications, (odds ratio = 3.78 for greater than or equal to 3 complications, p for Chi square trend, 0.0223), and had poorer prognosis translating into higher care costs, personnel effort, time, and human suffering. The excess hospital care cost was BDS\$2 267 per smoker per year. Despite a low prevalence of smoking, tobacco caused a substantial public health burden. Hospital care cost for patients who smoked was 1.86 times higher than for non-smokers, and five times more than the government per capita health allocation. The annual excess hospital care costs in 1556 similar smokers would have exceeded the annual tobacco revenue. [References: 22]

Publication Type

Article

Citation 6.**Authors**

Rosito GA, D'Agostino RB, Massaro J, Lipinska L, Mittleman MA, Sutherland P, Wilson PWF, Levy D, Muller JE, Tofler GH.

Title

Association between obesity and a prothrombotic state: the Framingham Offspring Study

Source

Thrombosis & Haemostasis. 91(4):683-689, 2004 Apr.

Abstract

Although obesity is associated with increased cardiovascular risk, the mechanism has not been fully explained. Since thrombosis is a critical component of cardiovascular disease, we examined the relationship between obesity and hemostatic factors. We studied 3230 subjects (55% females, mean age 54 years) without a history of cardiovascular disease in cycle 5 of the Framingham Offspring Study. Obesity was assessed by body mass index and waist-to-hip ratio. Fasting blood samples were obtained for fibrinogen, plasminogen activator inhibitor (PAI-I) antigen, tissue plasminogen activator (tPA) antigen, factor VII antigen, von Willebrand factor (VWF), and plasma viscosity. Body mass index was directly associated with fibrinogen, factor VII, PAI-I and tPA antigen in both men and women ($p < 0.001$) and with VWF and viscosity in women. Similar associations were present between waist-to-hip ratio and the hemostatic factors. With minor

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exceptions for VWF and viscosity, all associations persisted after controlling for age, smoking, total and HDL cholesterol, triglycerides, glucose level, blood pressure, and use of antihypertensive medication. The association between increased body mass index and waist-to-hip ratio and prothrombotic factors and impaired fibrinolysis suggests that obesity is a risk factor whose effect is mediated in part by a prothrombotic state. [References: 36]

Publication Type

Article

Citation 7.**Authors**

Jono S, Ikari J, Vermeer C, Dissel P, Hasegawa K, Shioi A, Taniwaki H, Kizu A, Nishizawa K, Saito S.

Title

Matrix Gla protein is associated with coronary artery calcification as assessed by electron-beam computed tomography

Source

Thrombosis & Haemostasis. 91(4):790-794, 2004 Apr.

Abstract

Matrix Gla protein (MGP) is an extracellular matrix protein with wide tissue distribution. It has been demonstrated that the expression of MGP is detected not only in the normal blood vessels but also calcified atherosclerotic plaques, and that MGP deficient mice develop extensive arterial calcification. MGP is thought to be a regulator of vascular calcification. A recent clinical study demonstrates the association between polymorphisms of the MGP gene and increased risk of myocardial infarction. However, there are no reports of the relationship between serum MGP levels and coronary artery calcification (CAC). We evaluated the severity of CAC using electron-beam computed tomography (EBCT), and measured serum MGP levels by enzyme-linked immunosorbent assay in 115 subjects with suspected coronary artery disease. CAC scores were correlated with traditional risk factors, such as age, gender, hypertension, diabetes, hyperlipidemia and smoking. The serum MGP levels were lower in patients with CAC than in those without CAC ($p < 0.001$). As the severity of CAC increased, there was a significant decrease in serum MGP levels. Serum MGP levels (U/L) were 116.7 ± 20.3 , 104.9 ± 19.2 , 95.2 ± 15.2 and 82.2 ± 19.7 , (medians 115.5, 105.0, 94.8, and 81.9) for the subjects with normal (CAC score = 0), mild (CAC score = 1 to 99), moderate (CAC score = 100 to 400), and severe (CAC score > 400) coronary calcification, respectively. We found that serum MGP levels are inversely correlated with the severity of CAC. These data suggest a possible role for MGP in the development of vascular calcification. [References: 26]

Publication Type

Article

Citation 8.**Authors**

Blumentals WA, Foulis PR, Schwartz SW, Mason TJ.

Title

Does warfarin therapy influence the risk of bladder cancer?

Source

Thrombosis & Haemostasis. 91(4):801-805, 2004 Apr.

Abstract

There has been growing interest in studying the biological effects of certain drugs and their potential to reduce the risk of various cancers. One study reported a decrease in the incidence of

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urogenital cancers in a trial with patients who received warfarin for treatment of venous thromboembolism, but a limitation to this study of urogenital cancers was the very small number of bladder cancer cases that developed following warfarin therapy. The objective of the present study is to measure the association between warfarin use and bladder cancer. A total of 330 cases with bladder cancer were identified at the James A. Haley Veterans' Administration (VA) Hospital in Tampa, Florida, using a combination of computerized pathology records and inpatient and outpatient diagnoses. Controls were randomly selected from the VA computerized administrative database and 1293 controls were included for analysis. Unconditional logistic regression analysis was performed to assess the risk of bladder cancer after adjusting for age, gender, and cigarette smoking. Among warfarin users, although there was a 27% elevation in risk, it did not differ significantly from nonusers (OR = 1.27, 95% CI = 0.85, 1.89). No duration-response relationship was observed between anticoagulant use and risk of bladder cancer. The results suggest that warfarin does not protect against bladder cancer, at least in male smokers, the highest risk population for bladder cancer. [References: 12]

Publication Type
Article

Citation 9.

Authors

Zhang XF. Attia J. D'Este C. Yu XH.

Title

Prevalence and magnitude of classical risk factors for stroke in a cohort of 5092 Chinese steelworkers over 13.5 years of follow-up

Source

Stroke. 35(5):1052-1056, 2004 May.

Abstract

Background and Purpose - Stroke is the most common manifestation of cardiovascular disease (CVD) among Chinese men. This study addresses the prevalence and magnitude of classic CVD risk factors associated with total, ischemic, and hemorrhagic stroke in a Chinese cohort of at-risk men, compared with white populations. We also address which blood pressure index: systolic blood pressure (SBP), diastolic blood pressure (DBP), mean arterial pressure (MAP), and pulse pressure (PP) is the best predictor of stroke.

Methods - A cohort of 5092 male steelworkers (aged 18 to 74 years) recruited between 1974 to 1980 was followed up for an average of 13.5 years. The results showed that the risk ratios (RRs) of stroke associated with classic risk factors in this Asian population were not different than in whites, except for blood pressure. The RRs of total stroke for each 10 mm Hg rise in SBP and DBP in this Asian group (1.4 and 1.8, respectively) were higher than in whites (1.2 to 1.3 and 1.2 to 1.5, respectively). The population attributable risk (PAR) for hypertension (160/95 mm Hg cutoff) to stroke was higher in Asians (ie, 31% for ischemic and 42% for hemorrhagic stroke) than in whites (25% and 34%, respectively).

Conclusion - Our results indicate that hypertension is a greater risk factor for stroke in Asians than whites, especial for hemorrhagic stroke. The most predictive blood pressure (BP) index for stroke is MAP. However, the prevalence or magnitude of these traditional risk factors appears unlikely to explain the differing spectrum of CVD among Asians. [References: 29]

Publication Type
Article

Citation 10.

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6/23/2004

Authors

Paramo JA. Orbe J. Belouqui O. Benito A. Colina I. Martinez-Vila E. Diez J.

Title

Prothrombin fragment 1+2 is associated with carotid intima-media thickness in subjects free of clinical cardiovascular disease

Source

Stroke. 35(5):1085-1089, 2004 May.

Abstract

Background and Purpose - Thrombin, a central enzyme in the clotting cascade, plays a role not only in thrombosis but also in the progression of atherosclerosis. We studied the relationship between prothrombin fragment 1 + 2 (F1 + 2), a specific marker of thrombin generation in vivo, and carotid intima-media thickness (IMT), an index of subclinical atherosclerosis.

Methods - We examined 181 asymptomatic middle-aged subjects (mean age 55.6 years, 76.7% men) free of overt clinical atherosclerotic disease. F1 + 2 was measured by enzyme-linked immunosorbent assay and IMT by duplex ultrasonography of carotid artery. Multiple linear regression analysis was used to assess the relationship between the 2 parameters.

Results - Compared with individuals in the lowest tertile of F1 + 2, those in the upper tertile (>0.55 nmol/L) showed significantly higher IMT ($P < 0.01$). In correlation analysis, a positive relationship was found between plasma F1 + 2 and carotid IMT. F1 + 2 also correlated positively with cholesterol ($P < 0.008$) and low-density lipoprotein cholesterol ($P < 0.005$), but not with blood pressure or body mass index. In the multivariate analysis, the association of F1 + 2 with carotid IMT remained significant ($P < 0.001$) after adjustment for age, sex, body mass index, systolic blood pressure, cholesterol, diabetes, and smoking.

Conclusions - In a population sample of adults without clinically overt atherosclerotic disease, the plasma levels of F1 + 2 were significantly associated with carotid IMT, suggesting a relationship between thrombin generation and the development atherosclerosis. [References: 37]

Publication Type
Article

Citation 11.

Authors

Austin JB. Selvaraj S. Russell G.

Title

Childhood asthma in the Highlands of Scotland - Morbidity and school absence

Source

Scottish Medical Journal. 49(1):18-21, 2004 Feb.

Abstract

Background The prevalence of childhood asthma in Scotland is one of the highest in the world. The morbidity secondary to allergic diseases is significant in terms of costs to the nation and effects on the family including the child. **Aims** The aims of this study were to describe the prevalence of asthma, eczema and hay fever in the Highlands of Scotland and in the Shetland Isles and to examine factors in relation to quality of life and social deprivation. **Method** A total population survey of 12 year old children using a parent completed questionnaire. **Results** 86.3% (2658/3080) returned questionnaires. Of the 2549 questionnaires analysed, 476 (18.7%) reported asthma ever, 362 (14.2%) wheeze in last 12 months, 508 (19.9%) reported hay fever ever and 555 (21.8%) reported eczema ever. Of the children reporting asthma or wheeze, 35.4% (229/647) had missed school because of asthma or wheeze, 38.0% (246/647) had missed physical

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education. 62.5% (354/566) of subjects with wheeze ever reported sleep disturbance. Deprivation measured by DEPCAT scores was associated with maternal smoking and bronchitis in the child but not with allergic diseases. Conclusion Compared with previous studies, the prevalence of asthma was unchanged but eczema has increased in Highland adolescents. Allergic disease has a significant impact on school attendance and physical activity. Deprivation was associated with maternal smoking and bronchitis in the child but not with allergic diseases. The impact of allergic diseases in rural areas may be different from urban areas. [References: 30]

Publication Type
Article

Citation 12.

Authors

Al-Ghamdi AA.

Title

Role of HbA1c in management of diabetes mellitus

Source

Saudi Medical Journal. 25(3):342-345, 2004 Mar.

Abstract

Objective: To represent that glycosylated hemoglobin (HbA1c) is not requested by the physicians in spite of its critical importance in the monitoring of glycemic control and prediction of complications due to diabetes.

Methods: A cross-sectional study was conducted at the outpatient department of King Abdul-Aziz University Hospital, Jeddah, Kingdom of Saudi Arabia, between October 2002 and July 2003. Out of the 265 known patients with diabetes, 130 patients were included in the study, which had HbA1c levels registered in their medical records. Demographic features, smoking habit, presence of hypertension, hyperlipidemia were recorded. Detailed information on diabetes were recorded, which included duration, type (type I or type II) and pattern of treatment, degree of glycemic control (assessed by two-points blood sugar and HbA1c levels). Screening for microvascular complications was recorded.

Results: Only 130 (49%) of the patients with diabetes were included in the study. Poor control was detected in the majority of the patients with diabetes. There was a difference in the detection of poor glycemic control by both methods; HbA1c levels showed poor control in 77% of the patients and by the two-point blood sugar (2-PBS) methods in 69% of the patients. Only 70% of the patients with poor glycemic control by HbA1c showed poor control by 2-PBS ($p=0.7$). Poor control was detected in 45% of the patients using insulin by measuring HbA1c levels, and by measuring 2-PBS in 34% of the patients ($p=0.005$, $p=0.16$). A significant relation was found between HbA1c levels, retinopathy and nephropathy ($p=0.02$, $p=0.05$).

Conclusion: Guidelines of the American Diabetic Association (ADA) regarding proper management of patients with diabetes should be followed to achieve the recommended outcome. Glycosylated hemoglobin levels should be checked every 3 months. Physicians and patients must be advised not to depend solely on 2-PBS results, especially for insulin dependant diabetics. [References: 16]

Publication Type
Article

Citation 13.

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Authors

Sulli A. Ghio M. Bezante GP. Deferrari L. Craviotto C. Sebastiani V. Sefti M. Barsotti A. Cutolo M. Indiveri F.

Title

Blunted coronary flow reserve in systemic sclerosis

Source

Rheumatology. 43(4):505-509, 2004 Apr.

Abstract

Objectives. We investigated whether the non-invasive determination of coronary flow reserve (CFR), as evaluated by transthoracic Doppler echocardiography, might be a potential method to detect early dysfunction of cardiovascular system in patients affected by systemic sclerosis (SSc) without clinical signs or symptoms of cardiac impairment. The possible correlations between the CFR values and the duration of the disease, specific autoantibodies and cutaneous involvement subsets were investigated.

Methods. Forty-four consecutive patients affected by SSc were analysed. The CFR was detected in the distal left anterior descending coronary artery by contrast-enhanced transthoracic second harmonic Doppler in all SSc patients and in 16 healthy controls. CFR was assessed at rest and during hyperaemia induced by administration of adenosine at 0.14 mg/kg/min over 5 min. The CFR was calculated as the ratio between hyperaemic (peak adenosine infusion) and resting peak diastolic velocity (PdvCFR) and resting velocity time integral (VtiCFR). Past medical history was carefully investigated.

Results. Both PdvCFR and VtiCFR were significantly reduced in SSc patients when compared with controls ($P < 0.0001$). In particular, both PdvCFR and VtiCFR were significantly lower in patients with dSSc when compared with patients affected by ISSc ($P < 0.02$ and $P < 0.04$ respectively). No statistically significant correlation was found between CFR values and history of smoking, serum levels of cholesterol or triglycerides, blood pressure, age of patients, duration of SSc and serum autoantibody positivity for ANA, ACA and Scl70.

Conclusions. CFR is often reduced in SSc patients. CFR was lower in patients with dSSc than in those affected by ISSc. A reduced CFR value should be considered an indirect sign of heart involvement in scleroderma, but its clinical and prognostic implications need to be clarified. [References: 27]

Publication Type
Article

Citation 14.

Authors

de la Blanchardiere A. Meouchy G. Brunel P. Olivier P.

Title

Medical, psychological and social study in 350 patients in a precarious situation, undertaken by a permanently maintained health care facility in 2002 [French]

Source

Revue de Medecine Interne. 25(4):264-270, 2004 Apr.

Abstract

Purpose. - Precariousness and its consequences have not been re-evaluated in France since the introduction of the Law to fight exclusion, which instituted Universal Medical Cover (CMU) and permanently maintained health care facilities (PASS) in 1998.

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Method. - Throughout the year 2002, a descriptive medical, psychological and social prospective study was carried out amongst PASS patients seen in 2002 at Avignon Hospital.

Results. - Three hundred and fifty out of 359 patients have been analysed. Most of them were adults (93%), young (mean age 38), male (56%), foreigners from non-EU countries (73%), with an illegal status (69%). They were without any declared income (77%), but with accommodation (67%), living as married (or such) or single in equal proportion. They were often without social security cover (48%). Their dominant pathologies were infections (42% of the patients). The most frequently diagnosed conditions were obesity (14%), pregnancy (8%), lower back pain (7%), high blood pressure (7%), chronic hepatitis C virus infection (6%), fungal infections (6%) and traumas (6%). Dental (43%) and psychiatric (27%) disorders were very frequent. The analysis of sub-groups has shown that some disorders are more frequent in French and European patients: chronic hepatitis C virus infection (14% vs. 4%), traumas (14% vs. 4%), psychopathy (11% vs. 0%), alcohol abuse (32% vs. 5%), smoking (80% vs. 25%), cannabis (20% vs. 2%) or opioids (16% vs. 0%) use.

Conclusion. - Access to health care has been difficult in 2002 in Avignon mostly for illegal immigrants for whom the only valid response should be of a political nature. Both French and European communities who still do not benefit from CMU improvements probably mean local interventions and combined operations because of the homelessness and the addictions of these people. (C) 2003 Elsevier SAS. Tous droits reserves. [References: 25]

Publication Type
Article

Citation 15.

Authors

Kanarek RB, Carrington C.

Title

Sucrose consumption enhances the analgesic effects of cigarette smoking in male and female smokers

Source

Psychopharmacology. 173(1-2):57-63, 2004 Apr.

Abstract

Rationale. Nicotine has analgesic actions in experimental animals and humans. Moreover, the analgesic properties of nicotine in experimental animals are increased by intake of sweet-tasting nutritive fluids. It is important to determine if the effects of diet on nicotine-induced analgesia are limited to experimental animals, or if these effects can be translated from the laboratory to clinical research situations. **Objective.** This study investigated whether intake of a sweet-tasting sucrose solution would enhance the pain relieving actions of nicotine, administered in the form of cigarette smoking, in male and female college-aged students. The effects of smoking and sucrose intake on mood were also examined. **Method.** Using the cold pressor test, pain thresholds and pain tolerance were determined in 24 male and 25 female smokers. Each participant was tested 4 times. On 2 of the test days, participants drank a sucrose-containing beverage, and on 2 of the days, drank water. Twenty-five minutes later, participants either smoked a cigarette or did not smoke. Participants were tested 5 min later for their responses on the cold pressor test. To determine if mood was altered by smoking or sucrose intake, the Profile of Mood Scale was administered immediately preceding and following experimental manipulations. **Results.** Cold threshold and cold tolerance were greater when participants were allowed to smoke than when they were not allowed to smoke. While men and women responded in a similar manner to the experimental manipulations, men displayed significantly greater cold threshold and cold

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tolerance than women. Sucrose consumption augmented the effects of smoking on cold threshold, but not on cold tolerance. Men reported feeling significantly more vigorous and less angry, and women reported feeling significantly less tense after they had smoked than when they had not smoked. Sucrose consumption did not alter self-reports of mood in either men or women. **Conclusion.** These findings suggest that sucrose augments the analgesic properties of nicotine in humans, as well as in experimental animals, and suggest that diet could serve as an adjunct in the control of pain. [References: 64]

Publication Type
Article

Citation 16.

Authors

Steptoe A, Owen N, Kunz-Ebrecht SR, Brydon L.

Title

Loneliness and neuroendocrine, cardiovascular, and inflammatory stress responses in middle-aged men and women

Source

Psychoneuroendocrinology. 29(5):593-611, 2004 Jun.

Abstract

Loneliness is a psychological experience related to social isolation and perceived lack of companionship, and may be relevant to health risk. The revised UCLA loneliness scale was completed by 240 working men and women aged 47-59 years, and related to affective state and neuroendocrine, cardiovascular, and inflammatory responses. Loneliness scores were not associated with gender, age or socioeconomic position, but were lower in married than single or divorced participants, and were positively related to social isolation, low emotional support, ratings of depression, hopelessness and low self-esteem, and to reported sleep problems. Diastolic blood pressure reactions to acute mental stress were positively correlated with loneliness in women but not men, independently of age, socioeconomic status, smoking, body mass and marital status ($p = 0.014$). Lonely individuals also displayed significantly greater fibrinogen ($p = 0.038$) and natural killer cell responses ($p = 0.042$) to stress, independently of covariates. The cortisol response over the first 30 min following waking was positively associated with loneliness after adjusting for waking cortisol value, sex, socioeconomic status, smoking, time of waking, and body mass ($p = 0.046$). We conclude that loneliness is a psychological experience with potentially adverse effects on biological stress processes that may be relevant to health. (C) 2003 Elsevier Ltd. All rights reserved. [References: 68]

Publication Type
Article

Citation 17.

Authors

Leistikow B.

Title

Lung cancer rates as an index of tobacco smoke exposures: validation against black male similar to non-lung cancer death rates, 1969-2000

Source

Preventive Medicine. 38(5):511-515, 2004 May.

Abstract

Background. Researchers use lung cancer death rates (rates) as an index of the cumulative burdens of smoking. That index lacks direct validation and calibration. So this study directly

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validates and calibrates that index against annual similar tonon-lung (all-sites minus lung and stomach) rates from 1969 to 2000 in United States black men, then estimates their cancer death rate smoking-attributable fractions (SAFs).

Methods. This study uses linear regression, age-adjusted rates from <http://www.seer.cancer.gov/canques>, and the formula $SAF = (1 - ((rate\ in\ the\ unexposed) / (rate\ in\ the\ exposed)))$. Estimated rates in the unexposed range between the 1969 rate and the rate predicted for a population with no smoking-attributable lung cancers. Stomach and lung cancer rate SAFs were based on published cohort studies.

Results. Lung cancer death rates predicted 98% and 97% of the variances in similar tonon-lung cancer death rates throughout their 1969-1990 34% rise and subsequent declines, respectively (each $P < 0.0001$). The findings suggest that the SAF of the all-sites cancer death rate in black men peaked at 66% in 1990.

Conclusions. Lung cancer death rates were a good index of smoke exposure for predicting similar tonon-lung cancer death rates in black men. Smoking may cause most premature cancer deaths in black men. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 24]

Publication Type
Article

Citation 18.

Authors

Inoue M. Hanaoka T. Sasazuki S. Sobue T. Tsugane S.

Title

Impact of tobacco smoking on subsequent cancer risk among middle-aged Japanese men and women: data from a large-scale population-based cohort study in Japan - the JPHC study

Source

Preventive Medicine. 38(5):516-522, 2004 May.

Abstract

Background. The present study aimed to obtain a relevant epidemiological index of the impact of tobacco smoking on the subsequent risk of cancer in Japan.

Methods. We conducted a cohort analysis on the possible association between tobacco smoking habits and total cancer risk among a middle-aged Japanese population, using a large-scale population-based cohort of 92,792 subjects (44,521 men and 48,271 women) with 10-year follow-up.

Results. During 1990-2001, 4,922 cases of cancer (2,969 men and 1,953 women) were newly diagnosed. From the baseline questionnaire, 52.2% of men were current smokers and they presented a significantly increased hazard ratio (HR) of subsequent cancer occurrence compared with never-smokers [HR 1.64, 95% confidence interval (95% CI) 1.48-1.82]. Only 5.6% of women were current smokers and their HR also represented a significant increase (HR 1.46, 95% CI 1.21-1.75). The corresponding population attributable fraction (PAF) (%) of total cancer incidence in men was 22.4% (95% CI 15.7%-28.5%) and 7.0% (95% CI 3.7%-10.3%) in relation to current and past exposures to tobacco smoke. In women, the PAF was only 2.2% and 0.6% due to the low prevalence of current and former smokers.

Conclusions. Our results suggest that 29% of male cancer and 3% of female cancer would be

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preventable in Japanese middle-aged population by avoidance of tobacco smoking. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 36]

Publication Type
Article

Citation 19.

Authors

Cohen D. DiCicco-Bloom B. Strickland PO. Headley A. Orzano J. Levine J. Scott J. Crabtree B.

Title

Opportunistic approaches for delivering preventive care in illness visits

Source

Preventive Medicine. 38(5):565-573, 2004 May.

Abstract

Objective. To describe how clinicians create opportunities to deliver preventive care in illness visits and assess the impact this has on preventive service delivery.

Method. Detailed and descriptive fieldnotes were collected from 18 purposefully selected family practices, including direct observations of 53 primary care clinicians and 1620 patient encounters. Conversation analysis was used to examine the conversational techniques employed to deliver four preventive services (smoking counseling, immunization delivery, mammography, and cervical cancer screening) in illness visits. Qualitative data was coded and analyzed to assess impact on preventive service delivery rates.

Results. Two methods for opportunistic preventive service delivery were observed. In the first, clinicians used the close of the medical encounter to make arrangement for follow-up preventive care. In the second approach, clinicians use a stepwise conversational device to exit talk about the patient's presenting problem and enter into relevant health habit advice. Quantitative analyses show that opportunistic methods are rarely used to deliver preventive services in illness visits. The stepwise technique was the most frequently used method. Patients treated by clinicians who used opportunistic techniques to deliver preventive care in illness visits were more likely to be up-to-date on smoking counseling and cervical cancer screening than those patients who were treated by clinicians who did not use opportunistic approaches.

Conclusions. Opportunistic preventive service delivery in illness visits can be an efficient and effective way to deliver preventive care. Although infrequently used, quantitative data suggest that the use of opportunistic approaches to deliver preventive services during illness visits can enhance preventive care rates. Interventions aimed at helping clinicians develop effective strategies for offering preventive care during illness visits may be an important complement to existing mechanical interventions that might, by themselves, be insufficient to improve preventive care. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 64]

Publication Type
Article

Citation 20.

Authors

An LC. Bernhardt TS. Blum J. Bland P. Center B. Ahluwalia JS. Foldes SS. Magnan S. Manley M.

Title

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Treatment of tobacco use as a chronic medical condition: primary care physicians' self-reported practice patterns

Source

Preventive Medicine. 38(5):574-585, 2004 May.

Abstract

Background. The goal of this study is to better understand factors related to physician treatment of tobacco as a chronic medical condition.

Methods. In the fall of 2000, we conducted a mail survey of primary care physicians in a large mid-western health plan. The response rate was 61% (750/1235). The survey assessed physician attitude, perceived clinic support, training, and self-reported tobacco treatment practices.

Results. Twenty-nine percent of physicians reported incomplete or minimal care. Thirty-nine percent reported providing assistance without follow-up, while 21% reported providing follow-up to tobacco users making quit attempts. Only 12% of physicians reported assistance and follow-up for all tobacco users. Controlling for differences in physician and clinic characteristics, more positive physician attitudes decreased incomplete or minimal care (OR = 4.62 most positive tertile vs. least positive, $P < 0.001$) but did not increase follow-up activities. Higher perceived clinic support increased follow-up care (OR = 2.69, highest tertile vs. lowest, $P < 0.001$). Physician training was associated with increased provision of ongoing care (OR = 1.88 per additional hour of training, $P < 0.001$).

Conclusions. Physician attitudes, clinic support, and training are related to different steps in the adoption of more complete tobacco use treatment. These findings support the need for multifaceted approaches to improve tobacco treatment as a chronic medical condition. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 48]

Publication Type
Article**Citation 21.****Authors**

Hoelscher DM. Feldman HA. Johnson CC. Lytle LA. Osganian SK. Parcel GS. Kelder SH. Stone EJ. Nader PR.

Title

School-based health education programs can be maintained over time: results from the CATCH Institutionalization study

Source

Preventive Medicine. 38(5):594-606, 2004 May.

Abstract

Background. Developing and evaluating interventions to influence students' opportunities for healthful choices has been a focus of school based health promotion research; however, few studies have examined the sustainability of these programs and viability of continued organizational implementation.

Methods. The purpose of this study was to determine the maintenance of Child and Adolescent Trial for Cardiovascular Health (CATCH) school-level changes in former intervention ($n = 56$) and former comparison ($n = 20$) schools 5 years post-intervention. Twelve schools unexposed to CATCH were measured as controls. Macronutrient content of 5 days of school lunch menus, amount and type of physical education (PE) classes, and health instruction practices in the classroom were assessed. An institutionalization score for schools was developed, using program

maintenance variables: % kcal from fat and saturated fat in school lunches, % PE class spent in vigorous and moderate-to-vigorous physical activity, and class time devoted to CATCH topics.

Results. Menus from 50% of former intervention cafeterias met the Eat Smart guidelines for fat, compared to 10% of former control cafeterias and 17% of unexposed school cafeterias ($P < 0.005$). There were no significant differences in implementation of CATCH PE goals between conditions. Although the total time spent teaching CATCH was low in former CATCH schools, the former intervention schools spent significantly more time teaching CATCH and taught more lessons as compared to former comparison schools. Former intervention schools had a higher mean institutionalization score than former comparison schools ($P < 0.001$). Training had the greatest impact on maintenance of CATCH.

Conclusions. Results from this study suggest that changes in the school environment to support healthful behaviors can be maintained over time. Staff training is an important factor in achieving institutionalization of these programs. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 52]

Publication Type
Article**Citation 22.****Authors**

Kim YIL

Title

Psychological constructs to predicting smoking behavior among Korean secondary school students

Source

Preventive Medicine. 38(5):620-627, 2004 May.

Abstract

Background. Current research on cigarette smoking has largely been focused on identifying the relationship between psychological attributes and the onset or initiation of smoking behavior. Few data are available on the psychological predictors of smoking behavior among Korean adolescents. This study examined the prevalence of smoking behavior among Korean adolescents, revealed factors affecting their smoking behavior, and identified the relationship between smoking behavior and psychological variables.

Methods. Four Korean-version questionnaires were used to assess adolescents' smoking behavior and their psychological attributes: Smoking Habit Scale, Multidimensional Health Locus of Scale, Self-efficacy Scale, and Self-esteem Scale. Frequency, Chi-square, ANOVA, correlation, and regression analyses were performed to analyze the data obtained in the study.

Results. The results indicate that smoking problem in the Korean adolescents is a crucial factor that might adversely affect their overall health. Forty-three percent of adolescents responded that they had smoked a cigarette in their lifetime and 26% are current smokers. Male adolescents were more likely to smoke in their lifetime and have currently smoked a cigarette than females. The adolescents aged 17-18 years had smoked more cigarette than those in other age groups. Among the five psychological variables, IHLC and self-efficacy significantly differentiated adolescents at different smoking status. Furthermore, IHLC, self-esteem, and self-efficacy were significantly correlated with smoking behavior and those psychological constructs had a significant linear relation to account for smoking behavior.

Conclusions. Psychological variables have a meaningful influence on smoking behavior of adolescents. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 32]

Publication Type
Article

Citation 23.

Authors

Moffatt RJ, Chelland SA, Pecott DL, Stamford BA.

Title

Acute exposure to environmental tobacco smoke reduces HDL-C and HDL2-C

Source

Preventive Medicine. 38(5):637-641, 2004 May.

Abstract

Background. Chronic environmental tobacco smoke (ETS) exposure increases an individual's risk of coronary artery disease by reducing high-density lipoprotein cholesterol (HDL-C). Currently, there is limited research on the acute effects of ETS on HDL-C. This study examined the acute influence of ETS on HDL-C and its subfractions.

Methods. Twelve male subjects (25.7 +/- 3.0 years) were examined to determine the influence of an acute 6-h exposure to ETS on lipid and lipoprotein levels. Baseline blood samples were drawn before ETS exposure from an antecubital vein at 6 am, 2 pm, and 10 pm. The following day, subjects were exposed to 6 h of ETS, approximately 4-10 pm. Blood was again collected at 8, 16 and 24 h following ETS exposure. Blood was assayed for total cholesterol (TC), HDL-C and its subfractions HDL2-C and HDL3-C.

Results. As a result of ETS exposure, HDL-C and HDL2-C levels were significantly reduced by 18% and 37%, respectively. This effect was sustained, with a decrease in HDL-C of 13% and HDL2-C of 28% still evident at 24-h post-exposure. TC was unchanged (pre- 187.3 +/- 41.6 and post- 187.0 +/- 46.3); however, there were significant decreases in the TC/HDL-C and HDL2-C/HDL3-C ratios by 16% and 29%, respectively, which were sustained for 24 h.

Conclusions. The findings of this study demonstrate that a 6-h exposure has a negative impact on lipid and lipoprotein profiles and that these levels remained depressed for at least 24 h. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 41]

Publication Type
Article

Citation 24.

Authors

Kremers SPJ, Mudde AN, De Vries H.

Title

Model of Unplanned Smoking Initiation of Children and Adolescents: an integrated stage model of smoking behavior

Source

Preventive Medicine. 38(5):642-650, 2004 May.

Abstract

Background. Two lines of psychological research have attempted to spell out the stages of adolescent smoking initiation. The first has focused on behavioral stages of smoking initiation,

while the second line emphasized motivational stages.

Methods. A large international sample of European adolescents (N = 10,170, mean age = 13.3 years) was followed longitudinally. Self-reported motivational and behavioral stages of smoking initiation were integrated, leading to the development of the Model of Unplanned Smoking Initiation of Children and Adolescents (MUSICA). The MUSICA postulates that youngsters experiment with smoking while they are in an unmotivated state as regards their plans for smoking regularly in the future.

Results. More than 95% of the total population resided in one of the seven stages distinguished by MUSICA. The probability of starting to smoke regularly during the 12 months follow-up period increased with advanced stage assignment at baseline. Unique social cognitive predictors of stage progression from the various stages were identified, but effect sizes of predictors of transitions were small.

Conclusions. The integration of motivational and behavioral dimensions improves our understanding of the process of smoking initiation. In contrast to current theories of smoking initiation, adolescent uptake of smoking behavior was found to be an unplanned action. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 57]

Publication Type
Article

Citation 25.

Authors

Gomez-Zamudio M, Renaud L, Labrie L, Masse R, Pineau G, Gagnon L.

Title

Role of pharmacological aids and social supports in smoking cessation associated with Quebec's 2000 Quit and Win campaign

Source

Preventive Medicine. 38(5):662-667, 2004 May.

Abstract

Background. This evaluation of the 2000 Quit and Win campaign in the province of Quebec, Canada, assessed the use and effectiveness of pharmacological aids, social support, and support resources (clinic program, support groups, books, telephone support) among contest participants. The reach of the contest was 1.3% of adult smokers: 20,400 participants.

Methods. Six months after the contest ended, 3,033 randomly selected participants completed telephone interviews about their smoking status and their use of nonform aids, social support, support resources, and pharmacological aids during their cessation attempt. Those who were abstinent from smoking were then reinterviewed 6 months later, that is, 12 months after the contest.

Results. Cessation rates were 66% at contest end, 36% at 6 months, and 22% at 12 months. Heavier smokers were somewhat more likely to have quit. Overall, 41% of respondents used any form of aid (support resources and pharmacological aids) in the first 6 months; among these, 42% used bupropion and 38% used nicotine patches. Those using bupropion were more likely to successfully quit smoking. Successful quitters rated the social support received from their buddy as more useful than did relapsers, and social support was unrelated to the use of pharmacological aids.

Conclusions. The results suggest that adequate investment in population-wide Quit and Win programs that provide a variety of appropriate aids to smokers, including social support and pharmacological products, can improve the reach of smokers. (C) 2004 The Institute For Cancer Prevention and Elsevier Inc. All rights reserved. [References: 17]

Publication Type
Article

Citation 26.

Authors

Li Y. Wang H.

Title

In utero exposure to tobacco and alcohol modifies neurobehavioral development in mice offspring: consideration a role of oxidative stress

Source

Pharmacological Research. 49(S):467-473, 2004 May.

Abstract

Objective: To determine whether in utero tobacco and alcohol exposure induces long-term neurobehavioral alterations and whether oxidative stress/damage is a possible causal factor. **Methods:** Gravid mice were subjected to tobacco smoking and alcohol consumption. Their offspring were subsequently evaluated in developmental and behavioral tests. Antioxidative enzymes and erythrocyte membrane fluidity of adult offspring were measured. **Results:** The intrauterine tobacco and alcohol exposure has resulted in significant reduced postnatal body and organ weights accompanied by reduced gestational body weight gain in their mothers. Such exposure also induced remarkable developmental delay in neonatal reflexes and notable behavioral deficit in adulthood, namely reduced motive coordination and locomotor activity as well as impaired learning and memory abilities. Furthermore, the formation of malondialdehyde (MDA) increased significantly whereas the activities of superoxide dismutase (SOD), glutathione peroxidase (GSH-PX), catalase (Cat) and glutathione S-transferases (GST) decreased in the cerebral cortex and liver of prenatal intoxicated offspring. The embryonic intoxication also markedly reduced erythrocyte membrane fluidity in offspring. **Conclusion:** Our study shows the long-term neurotoxicity associated with prenatal tobacco and alcohol exposure, and suggests that the deleterious outcome may be in relation to increased free radicals formation and oxidative stress. (C) 2003 Elsevier Ltd. All rights reserved. [References: 38]

Publication Type
Article

Citation 27.

Authors

Broussard DL. Magnus JH.

Title

Risk assessment and screening for low bone mineral density in a multi-ethnic population of women and men: does one approach fit all?

Source

Osteoporosis International. 15(5):349-360, 2004 May.

Abstract

Screening for osteoporosis is currently recommended for all women aged 65 years and older in the USA. How to address screening of non-white women and all men is unclear. Osteoporosis risk assessment questionnaires have been designed and tested mostly among postmenopausal white women, and there is a lack of consensus on appropriate bone mineral density (BMD) cut-

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off values for defining osteoporosis in non-white persons. The objectives of the present study were to identify a set of risk factors from published population-based studies in white women and men and determine the ability of these risk factors to predict osteoporosis and low BMD in African-American (AA), Mexican-American (MA), and white women and men, and to assess the diagnostic accuracy of this set of risk factors for identifying osteoporosis separately in AA, MA, and white women and men by the use of data for 2,590 women and 2,391 men 50-79 years of age from the third National Health and Nutrition Examination Survey (NHANES III). We employed the World Health Organisation (WHO) definition of osteoporosis, using race/ethnic and gender-specific young adult mean values when calculating the T scores. Low body-mass index, low calcium intake, current cigarette smoking, and physical inactivity were independent risk factors identified from population-based studies. The presence of one or more risk factors was associated with having osteoporosis and low BMD in all groups. The strength of these associations was greater when two or more risk factors were present but varied with race/ethnicity, gender, and age. We conclude that this set of osteoporosis risk factors predicts osteoporosis in non-white women and men. Furthermore, as a risk assessment tool, this set of risk factors might be useful for reducing the number of unnecessary BMD tests performed in older women as well as identifying non-white men who do not require BMD testing. [References: 32]

Publication Type
Article

Citation 28.

Authors

Pogrzebielski A. Lubaszewski W. Starzycka M. Kawecka-Jaszcz K.

Title

Fluorophotometric evaluation of blood-retinal barrier permeability in patients with essential hypertension

Source

Ophthalmologica. 218(3):180-184, 2004.

Abstract

Aim: The fluorophotometric evaluation of the blood-retinal barrier (BRB) integrity in patients with essential hypertension (EH) without signs of BRB damage. **Material and Methods:** 55 subjects participated in the study: 36 patients with EH and 19 normotensive healthy volunteers; 22 men and 33 women. The protocol included ophthalmic examination, fluorescein angiography, fluorophotometry, laboratory tests (total cholesterol, LDL and HDL cholesterol, triglycerides, fibrinogen, serum creatinine concentration, fasting glucose concentration, oral glucose test), urinary cotinine concentration measurement and cotinine-creatinine ratio (CCR) calculation. **Results:** BRB permeability (PBRB) in patients with EH was significantly higher than in the control group (2.24 ± 0.68 vs. 1.64 ± 0.64 nm/s; $p = 0.003$). In hypertensive patients with CCR > 50 ng/mg, the P-BRB was significantly higher than the PBRB in healthy volunteers not exposed to smoke (2.32 vs. 1.68 nm/s; $p < 0.05$). **Conclusions:** The PBRB in patients with EH is significantly higher than that in the normotensive control group, which shows the damaging effect of EH on the BRB. Copyright (C) 2004 S. Karger AG, Basel. [References: 17]

Publication Type
Article

Citation 29.

Authors

Sobel BFX. Sigmon SC. Griffiths RR.

<http://gateway2.ovid.com/ovidweb.cgi>

6/23/2004

Title

Transdermal nicotine maintenance attenuates the subjective and reinforcing effects of intravenous nicotine, but not cocaine or caffeine, in cigarette-smoking stimulant abusers

Source

Neuropsychopharmacology. 29(5):991-1003, 2004 May.

Abstract

The effects of transdermal nicotine maintenance on the subjective, reinforcing, and cardiovascular effects of intravenously administered cocaine, caffeine, and nicotine were examined using double-blind procedures in nine volunteers with histories of using tobacco, caffeine, and cocaine. Each participant was exposed to two chronic drug maintenance phases (21 mg/day nicotine transdermal patch and placebo transdermal patch). Within each drug phase, the participant received intravenous injections of placebo, cocaine (15 and 30 mg/70 kg), caffeine (200 and 400 mg/70 kg), and nicotine (1.0 and 2.0 mg/70 kg) in mixed order across days. Subjective and cardiovascular data were collected before and repeatedly after drug or placebo injection. Reinforcing effects were also assessed after each injection with a Drug vs Money Multiple-Choice Form. Intravenous cocaine produced robust dose-related increases in subjective and reinforcing effects; these effects were not altered by nicotine maintenance. Intravenous caffeine produced elevations on several subjective ratings; nicotine maintenance did not affect these ratings. Under the placebo maintenance condition, intravenous nicotine produced robust dose-related subjective effects, with maximal increases similar to the high dose of cocaine; nicotine maintenance significantly decreased the subjective and reinforcing effects of intravenous nicotine. The results of the present study demonstrate that chronic nicotine maintenance produces tolerance to the effects of intravenous nicotine, but does not affect the subjective or reinforcing effects of cocaine or caffeine. [References: 52]

Publication Type

Article

Citation 30.**Authors**

Lewis SJ. Cherry NM. Niven RM. Barber PV. Povey AC.

Title

Associations between smoking, GST genotypes and N7-methylguanine levels in DNA extracted from bronchial lavage cells

Source

Mutation Research-Genetic Toxicology & Environmental Mutagenesis. 559(1-2):11-18, 2004 Apr 11.

Abstract

N7-Methylguanine (N7-MeG) DNA adducts are markers of human exposure to methylating agents including tobacco-specific nitrosamines (TSNAs). Repair of this adduct is poor, so levels in lung tissue should reflect variation in both intensity of exposure and in metabolism. N7-MeG adducts in lung DNA from bronchial lavage samples were measured to determine whether levels were higher in smokers than non-smokers, and if levels were modified by genetic variation in carcinogen-metabolising enzymes. Adducts were detected in 38 out of 44 DNA samples by P-32 post-labelling of the N7-methyldeoxyguanosine-3'-monophosphate (N7-MedGp) isolated from DNA digests by two-stage HPLC. N7-MeG adduct levels were higher in smokers than in never smokers ((9.99+/-20.3) X 10(-7) versus (0.58+/-0.50) X 10(-7) N7-MedGp/deoxyguanosine-3'-monophosphate (dGp); P = 0.02) and intermediate in ex-smokers ((5.59+/-15.6) X 10(-7) N7-MedGp/dGp). Adduct levels tended to be higher in individuals with GSTM1 null, GSTT1 null or GSTP1 ile/ile genotypes. When genotypes were combined, N7-MedGp levels among GSTM1 null/GSTT1 null individuals (n = 6) were higher than among those having at least one wild-type

allele of these two genes ((26.1+/-38.0) X 10(-7) versus (2.73+/-4.07) X 10(-7) N7-MedGp/dGp), although the results were not statistically significant (P = 0.13). Adduct levels were highest in individuals with three unfavourable genotypes (GSTM1 null/GSTT1 null and GSTP1 ile/ile) compared with others ((74.5+/-13.1) X 10(-7) versus (2.64+/-3.89) X 10(-7) N7-MedGp/dGp, P = 0.02). N7-MeG adduct levels in DNA isolated from lung tissue thus reflect exposure to cigarette smoke, and genetic variation in carcinogen-metabolising enzymes may modify these levels. (C) 2004 Elsevier B.V. All rights reserved. [References: 27]

Publication Type

Article

Citation 31.**Authors**

Wu KY. Chiang SY. Huang TH. Tseng YS. Chen YL. Kuo HW. Hsieh CL.

Title

Formation of N-(2-hydroxyethyl)valine in human hemoglobin - effect of lifestyle factors

Source

Mutation Research-Genetic Toxicology & Environmental Mutagenesis. 559(1-2):73-82, 2004 Apr 11.

Abstract

The formation of N-(2-hydroxyethyl)valine (HEV) in hemoglobin has been considered as a biomarker to assess exogenous and endogenous exposures to ethylene oxide (EO) and/or ethylene (ET). Factors associated with daily exposures to such compounds might significantly affect the formation of HEV. Tobacco smoke containing EO elicited a significant increase in the levels of HEV amongst smokers, although other factors related to lifestyles may warrant further studies. The objective of this study was to specifically analyze HEV using a modified Edman degradation technique in order to study the association between lifestyle related factors (smoking, second-hand smoke exposure, tea and alcohol consumption) and HEV formation in vivo. Total of 148 Taiwanese volunteers with no history of occupational exposure to either EO or ET were recruited in this study. The HEV levels for smokers (204 +/- 151 pmol HEV/g globin, n = 70) were greater than those for non-smokers (57 +/- 46 pmol HEV/g globin, n = 78). HEV level increasing with the number of cigarettes smoked by subjects per day with a rate of 8.8 pmol HEV/g globin per cigarettes per day. Further analysis revealed that the rate of HEV formation in our study subjects was significantly associated with the number of daily cigarettes smoked (P < 0.001), but was not associated with tea or alcohol consumption, second-hand smoke exposure, subject age, or subject gender. These results suggest that the significantly higher levels of HEV for smokers than for non-smokers were mainly due to subject exposure to EO contained in cigarette smoke. (C) 2004 Elsevier B.V. All rights reserved. [References: 32]

Publication Type

Article

Citation 32.**Authors**

Yoxall V. Wilson J. Ioannides C.

Title

An improved method for the extraction of mutagens from human urine and cooked meat using blue rayon

Source

Mutation Research-Genetic Toxicology & Environmental Mutagenesis. 559(1-2):121-130, 2004 Apr 11.

Abstract

A reproducible method has been developed and validated that allows the detection of mutagenic material in human urine following the intake of a meal containing pan-fried beef patties. The mutagens are extracted from the urine with blue rayon and eluted with methanol/ammonia (100:1). Using C-14-2-amino-3-methylimidazo[4,5-f]quinoline (C-14-IQ) as a tracer, the extraction efficiency of heterocyclic amines was consistently found to exceed 90%. It was observed that the critical factor in attaining high extraction efficiencies was the concentration of blue rayon, which depended on the nature of the matrix. Constituents of human urine were demonstrated to compete with IQ for the binding sites on the blue rayon. For the determination of the mutagenic activity in the extracted urine, the O-acetylase over-expressing *Salmonella typhimurium* strain YG1024 was utilised, and the Ames test procedure was optimised with respect to S9 concentration and incorporation of a pre-incubation step. Using the developed procedure, a marked rise in mutagenic activity, determined both in the absence and presence of an activation system, was evident in human urine following the intake of a beef patty meal. Normal mutagenicity levels were restored within 24 h. Finally, a method is described, once again employing blue rayon, for the extraction of heterocyclic amines from cooked beef patties with a 92% efficiency, as exemplified by IQ. (C) 2004 Elsevier B.V. All rights reserved. [References: 26]

Publication Type
Article

Citation 33.**Authors**

Yamada Y. Ichihara S. Izawa H. Tanaka M. Yokota M.

Title

Genetic risk for coronary artery disease in individuals with or without type 2 diabetes

Source

Molecular Genetics & Metabolism. 81(4):282-290, 2004 Apr.

Abstract

Given that a substantial proportion of individuals with coronary artery disease (CAD) also have type 2 diabetes, it is important to identify genes that confer susceptibility to CAD independently in subjects with type 2 diabetes and in those without this condition. A large-scale association study was performed to identify genes that confer susceptibility to CAD in either the absence or presence of type 2 diabetes. The study population comprised 5207 unrelated Japanese individuals, including 3085 subjects with CAD and 2122 controls. Among all subjects, 1704 individuals had type 2 diabetes and 3503 individuals did not have this condition. The genotypes for 33 polymorphisms of 27 candidate genes were determined with a fluorescence- or colorimetry-based allele-specific DNA primer-probe assay system. Multivariate logistic regression analysis with adjustment for age, body mass index, and the prevalence of smoking, hypertension, hypercholesterolemia, and hyperuricemia revealed that the following polymorphisms were significantly ($P < 0.005$) associated with CAD: the 1019C > RARR; T of the connexin 37 gene for men with type 2 diabetes; the 2445G > RARR; A in the fatty acid-binding protein 2 gene for women with this condition; the -863C > RARR; A in the tumor necrosis factor- α gene, the -219G > RARR; T in the apolipoprotein E gene, the 1019C > RARR; T in the connexin 37 gene for men without type 2 diabetes; and the -482C > RARR; T in the apolipoprotein C-III gene for women without this condition. Genotyping of these polymorphisms may prove informative for assessment of the genetic risk for CAD in the absence or presence of type 2 diabetes. (C) 2004 Elsevier Inc. All rights reserved. [References: 38]

Publication Type
Article

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6/23/2004

Citation 34.**Authors**

Lyons GH. Judson GJ. Stangoulis JCR. Palmer LT. Jones JA. Graham RD.

Title

Trends in selenium status of South Australians

Source

Medical Journal of Australia. 180(8):383-386, 2004 Apr 19.

Abstract

Objective: To assess trends in selenium status in South Australians from 1977 to 2002.

Design: Six cross-sectional surveys.

Participants: 117 participants in 1977, 30 in 1979, 96 and 103 (separate surveys) in 1987, 200 in 1988, and 288 volunteer blood donors in 2002. A total of 834 healthy Australian adults (mean age, 42 years [range, 17-71 years]; 445 were male).

Main outcome measures: Plasma and whole blood selenium concentrations.

Results: The 2002 survey yielded a mean plasma selenium concentration of 103 mug/L (SE, 0.65), which reached the estimated nutritional adequacy level of 100 mug/L plasma selenium. Mean whole blood selenium declined 20% from the 1977 and 1979 surveys (mean whole blood selenium concentration, 153 mug/L) to the 1987, 1988 and 2002 surveys (mean whole blood selenium concentration, 122 mug/L). Plasma selenium was higher in men ($P = 0.01$), and increased with age in both men and women ($P = 0.008$).

Conclusions: In healthy South Australian adults sampled from 1977 to 2002, whole blood and plasma selenium concentrations were above those reported for most other countries and in most previous Australian studies, notwithstanding an apparent decline in selenium status from the late 1970s to the late 1980s. [References: 31]

Publication Type
Article

Citation 35.**Authors**

Lowe GDO.

Title

Venous and arterial thrombosis: epidemiology and risk factors at various ages

Source

Maturitas. 47(4):259-263, 2004 Apr 15.

Abstract

The incidence of both venous and arterial thrombosis increases exponentially with age in both men and women. Possible reasons include: increasing immobility, trauma, surgery and acute medical illness; increasing prevalence (and/or cumulative effects) of obesity, raised blood pressure, dyslipidaemia and glucose intolerance; increasing prevalence of atherosclerosis; and increasing circulating markers of inflammation (C-reactive protein, CRP) and thrombosis. While arterial thrombosis is less common in women, the relative risk for classical risk factors associated with myocardial infarction is at least as strong in women as in men, in prospective population-based studies using MONICA criteria (e.g. Scottish Heart Health Study, Reykjavik).

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Study). Some of these risk factors (e.g. smoking, cholesterol, triglycerides) show decreasing hazard ratios with age. Ongoing studies of newer potential risk factors for venous and arterial thrombosis (e.g. homocysteine, haemostatic and inflammatory variables) should elucidate their roles in risk prediction, including thrombotic risks of sex hormones which have effects on these variables. (C) 2004 Published by Elsevier Ireland Ltd. [References: 23]

Publication Type
Article

Citation 36.

Authors

Bramerson A. Johansson L. Ek L. Nordin S. Bende M.

Title

Prevalence of olfactory dysfunction: The Skovde population-based study

Source

Laryngoscope. 114(4):733-737, 2004 Apr.

Abstract

Objectives/Hypothesis: Patients with olfactory dysfunction appear repeatedly in ear, nose, and throat practices, but the prevalence of such problems in the general adult population is not known. Therefore, the objectives were to investigate the prevalence of olfactory dysfunction in an adult Swedish population and to relate dysfunction to age, gender, diabetes mellitus, nasal polyps, and smoking habits. **Study Design:** Cross-sectional, population-based epidemiological study. **Methods:** A random sample of 1900 adult inhabitants, who were stratified for age and gender, was drawn from the municipal population register of Skovde, Sweden. Subjects were called to clinical visits that included questions about olfaction, diabetes, and smoking habits. Examination was performed with a smell identification test and nasal endoscopy. **Results:** In all, 1387 volunteers (73% of the sample) were investigated. The overall prevalence of olfactory dysfunction was 19.1%, composed of 13.3% with hyposmia and 5.8% with anosmia. A logistic regression analysis showed a significant relationship between impaired olfaction and aging, male gender, and nasal polyps, but not diabetes or smoking. In an analysis of a group composed entirely of individuals with anosmia, diabetes mellitus and nasal polyps were found to be risk factors, and gender and smoking were not. **Conclusion:** The sample size of the population-based study was adequate, with a good fit to the entire population, which suggests that it was representative for the Swedish population. Prevalence data for various types of olfactory dysfunction could be given with reasonable precision, and suggested risk factors analyzed. The lack of a statistically significant relationship between olfactory dysfunction and smoking may be controversial. [References: 33]

Publication Type
Article

Citation 37.

Authors

Humphries SE. Morgan L.

Title

Genetic risk factors for stroke and carotid atherosclerosis: insights into pathophysiology from candidate gene approaches [Review]

Source

Lancet Neurology. 3(4):227-236, 2004 Apr.

Abstract

Ischaemic stroke is the most common form of stroke and is caused by atherosclerosis in most

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patients. Several genetic determinants contribute to stroke risk. Of these, carotid intimal-medial wall thickness (IMT) is particularly relevant, because it is a surrogate measure of subclinical atherosclerosis and a strong predictor of future ischaemic stroke. Studies of twins, siblings, and families have provided significant evidence for heritability, but the genes involved have not been identified. Some researchers have reported that IMT is high in people with functional variants of genes related to matrix deposition (MMP3), inflammation (interleukin 6), and lipid metabolism (hepatic lipase, APOE, CETP, and PON1). In this review, we assess the robustness of these associations and examine whether there is any evidence of risk modification by factors, such as smoking. [References: 134]

Publication Type
Review

Citation 38.

Authors

Constantinescu M. Turbat-Herrera EA. Wu JH. Rivette D. Price KA. Aarstad RF. Mathews-Greer JM.

Title

Recurrent hoarseness and shortness of breath in an adult smoker

Source

Laboratory Medicine. 35(5):276-278, 2004 May.

Publication Type
Editorial Material

Citation 39.

Authors

Scuteri A. Najjar SS. Muller DC. Andres R. Hougaku H. Metter EJ. Lakatta EG.

Title

Metabolic syndrome amplifies the age-associated increases in vascular thickness and stiffness

Source

Journal of the American College of Cardiology. 43(8):1388-1395, 2004 Apr 21.

Abstract

OBJECTIVES We sought to evaluate whether the clustering of multiple components of the metabolic syndrome (MS) has a greater impact on these vascular parameters than individual components of MS.

BACKGROUND Intima-media thickness (IMT) and vascular stiffness have been shown to be independent predictors of adverse cardiovascular events. The MS is defined as the clustering of three or more of the cardiovascular risk factors of dysglycemia, hypertension, dyslipidemia, and obesity.

METHODS Carotid IMT and stiffness were derived via B-mode ultrasonography in 471 participants from the Baltimore Longitudinal Study on Aging, who were without clinical cardiovascular disease and not receiving antihypertensive therapy.

RESULTS The MS conferred a disproportionate increase in carotid IMT (+16%, $p < 0.0001$) and stiffness (+32%, $p < 0.0001$), compared with control subjects. Multiple regression models, which included age, gender, smoking, low-density lipoprotein, as well as each individual component of MS as continuous variables, showed that MS was an independent determinant of both IMT ($p = 0.002$) and stiffness ($p = 0.012$). The MS was associated with a greater prevalence of subjects

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whose values were in the highest quartiles of IMT, stiffness, or both.

CONCLUSIONS Even after taking into account each individual component of MS, the clustering of at least three of these components is independently associated with increased IMT and stiffness. This suggests that the components of MS interact to synergistically impact vascular thickness and stiffness. Future studies should examine whether the excess cardiovascular risk associated with MS is partly mediated through the amplified alterations in these vascular properties. (C) 2004 by the American College of Cardiology Foundation [References: 58]

Publication Type
Article

Citation 40.

Authors

Fung MM, Bettencourt R, Barrett-Connor E.

Title

Heart disease risk factors predict erectile dysfunction 25 years later - The Rancho Bernardo Study

Source

Journal of the American College of Cardiology. 43(8):1405-1411, 2004 Apr 21.

Abstract

OBJECTIVES We examined whether common coronary heart disease (CHD) risk factors measured in mid-life predict erectile dysfunction (ED) 25 years later.

BACKGROUND Retrospective and cross-sectional studies have suggested that ED is associated with classic CHD risk factors, but few prospective studies have studied these associations.

METHODS In this prospective study of community-dwelling men age 30 to 69 years, seven classic CHD risk factors (age, smoking, hypertension, diabetes, hypercholesterolemia, hypertriglyceridemia, and obesity) were assessed from 1972 to 1974. In 1998, after an average follow-up of 25 years, surviving male participants were asked to complete the International Index of Erectile Function (IIEF-5), which allows stratification of ED into five groups.

RESULTS Sixty-eight percent of the surviving men returned, and 60% completed the IIEF-5 questionnaire. Respondents had more favorable levels of all heart disease risk factors at baseline than non-respondents. At baseline, the average age of the 570 ED study participants was 46 years; at follow-up, their average age was 72 years. Mean age, body mass index, cholesterol, and triglycerides were each significantly associated with an increased risk of ED. Cigarette smoking was marginally more common in those with severe/complete ED, as compared with those without ED. Blood pressure and fasting blood glucose were not significantly associated with ED, likely due to selective mortality.

CONCLUSIONS Improving CHD risk factors in mid-life may decrease the risk of ED as well as CHD. Erectile dysfunction should be included as an outcome in clinical trials of lipid-lowering agents and lifestyle modifications. (C) 2004 by the American College of Cardiology Foundation [References: 35]

Publication Type
Article

Citation 41.

<http://gateway2.ovid.com/ovidweb.cgi>

6/23/2004

Authors

Wu WKK, Cho CH.

Title

The pharmacological actions of nicotine on the gastrointestinal tract [Review]

Source

Journal of Pharmacological Sciences. 94(4):348-358, 2004 Apr.

Abstract

Increasing use of tobacco and its related health problems are a great concern in the world. Recent epidemiological findings have demonstrated the positive association between cigarette smoking and several gastrointestinal (GI) diseases, including peptic ulcer and cancers. Interestingly, smoking also modifies the disease course of ulcerative colitis (UC). Nicotine, a major component of cigarette smoke, seems to mediate some of the actions of cigarette smoking on the pathogenesis of GI disorders. Nicotine worsens the detrimental effects of aggressive factors and attenuates the protective actions of defensive factors in the processes of development and repair of gastric ulceration. Nicotine also takes part in the initiation and promotion of carcinogenesis in the GI tract. In this regard, nicotine and its metabolites are found to be mutagenic and have the ability to modulate cell proliferation, apoptosis, and angiogenesis during tumorigenesis through specific receptors and signalling pathways. However, to elucidate this complex pathogenic mechanism, further study at the molecular level is warranted. In contrast, findings of clinical trials give promising results on the use of nicotine as an adjuvant therapy for UC. The beneficial effect of nicotine on UC seems to be mediated through multiple mechanisms. More clinical studies are needed to establish the therapeutic value of nicotine in this disease. [References: 107]

Publication Type

Review

Citation 42.

Authors

Alpagot T, Duzgunes N, Wolff LF, Lee A.

Title

Risk factors for periodontitis in HIV+ patients

Source

Journal of Periodontal Research. 39(3):149-157, 2004 Jun.

Abstract

Objective: The purpose of this study was to identify risk factors for periodontitis associated with human immunodeficiency virus (HIV) infection.

Methods: A total of 152 HIV+ patients were recruited from the CARE clinic at the University of the Pacific School of Dentistry. Clinical measurements (gingival index, plaque index, bleeding index, probing depth, and attachment loss), gingival crevicular fluid (GCF) and subgingival plaque samples were taken from eight sites of each patient at baseline and 6-month visits. GCF neutrophil elastase was determined by measurement of p-nitroanilide resulting from hydrolysis of an elastase-specific peptide. GCF beta-glucuronidase was determined by release of 4-methylumbelliferone from hydrolysis of a specific substrate. A bacterial concentration fluorescence immunoassay was used to detect periodontopathic bacteria in subgingival plaque samples.

Results: Viral load, age, smoking pack-years, *Fusobacterium nucleatum*, *Prevotella intermedia*, *Actinobacillus actinomycetemcomitans*, *Porphyromonas gingivalis*, neutrophil elastase, and beta-glucuronidase were significantly correlated with clinical measurements ($0.0001 < p < 0.05$). Significantly higher levels of elastase, beta-glucuronidase, *F. nucleatum*, *P. intermedia*, and *A.*

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actinomycetemcomitans were found at progressing sites than in non-progressing sites ($0.001 < p < 0.05$).

Conclusions: These data indicate that age, smoking pack-years, viral load, *F. nucleatum*, *P. intermedia*, *A. actinomycetemcomitans*, elastase, and beta-glucuronidase are risk factors for periodontitis in HIV+ patients. [References: 39]

Publication Type
Article

Citation 43.

Authors

Efrid JT. Friedman GD. Sidney S. Klatsky A. Habel LA. Udaltsova NV. Van den Eeden S. Nelson LM.

Title

The risk for malignant primary adult-onset glioma in a large, multiethnic, managed-care cohort: cigarette smoking and other lifestyle behaviors

Source

Journal of Neuro-Oncology. 68(1):57-69, 2004 May.

Abstract

Purpose: To determine the risk for malignant primary adult-onset glioma (MPAG) associated with cigarette smoking and other lifestyle behaviors in a large, multiethnic, managed-care cohort.

Methods: The study population included a cohort of 133,811 subscribers to the Kaiser Permanente Medical Care Program of Northern California who had received a multiphasic health checkup and questionnaire between 1977 and 1985, were at least 25 years old at their start of follow-up, and had no prior history of benign or malignant brain tumors. In this cohort, patients were followed for up to 21 years for the development of MPAG.

Results: Risk for MPAG among women increased with increasing packs of cigarettes smoked per day (p -for-trend = 0.04), adjusting for cigar and pipe smoking, patient age, sex, race, education, alcohol use and coffee consumption. A similar pattern was not observed for men. Individuals who smoked marijuana at least once a month, adjusting for cigarette smoking (packs smoked per day) and for the factors noted above, had a 2.8-fold ($CI = 1.3$ - 6.2) increased risk for MPAG. Relative risk for MPAG increased with increasing consumption of coffee (p -for-trend = 0.05).

Conclusions: Cigarette smoking was associated with an increased risk for MPAG among women but not among men. Individuals who smoked marijuana at least once a month had an increased risk for MPAG, although no dose-response relation was observed. Drinkers of >7 cups of coffee per day had a 70% increased risk for MPAG and smaller risk elevation for lower consumption. Alcohol usage was not associated with an increased risk for MPAG. [References: 94]

Publication Type
Article

Citation 44.

Authors

Koga T. Horio Y. Mitsudomi T. Takahashi T. Yatabe Y.

Title

Identification of MGB1 as a marker in the differential diagnosis of lung tumors in patients with a

history of breast cancer by analysis of publicly available SAGE data

Source

Journal of Molecular Diagnostics. 6(2):90-95, 2004 May.

Abstract

The risk of developing second primary cancers is increased in patients with breast cancer. The lung is one of the major target organs, and therefore a differential diagnosis between primary and metastatic cancers is required for the treatment of lung tumors in patients with a history of breast cancer. However, biopsy specimens frequently result in small, fragmented tissues containing only a few, degenerated cancer cells. We attempted to find a useful marker for differential diagnosis, using the online SAGE database. We selected three molecules, small breast epithelial mucin (SBEM), prostate epithelium-specific Ets transcription factor (PDEF), and mamaglobin (MGB1), as potential markers for breast cancer. SBEM and PDEF proved of no use for practical differential diagnosis because they are expressed in the normal bronchus. In contrast, expression of MGB1 was detected in all 22 primary breast cancers, but not in 22 normal lung tissues. Furthermore, all 12 metastatic breast cancers examined demonstrated positive MGB1 transcripts, whereas one of 48 primary lung adenocarcinomas expressed MGB1. This suggests that MGB1 can serve as a differential molecular marker. In practice, prospective examination, using the nine cases with a history of breast cancer, confirmed the usefulness of MGB1 in differential diagnosis. [References: 25]

Publication Type
Article

Citation 45.

Authors

Jang AS. Choi IS. Lee S. Nam HS. Kweon SS. Son MH. Lee JH. Park SW. Kim DJ. Uh ST. Kim YH. Park CS.

Title

The effect of passive smoking on asthma symptoms, atopy, and airway hyperresponsiveness in schoolchildren

Source

Journal of Korean Medical Science. 19(2):214-217, 2004 Apr.

Abstract

Passive smoking is a major cause of respiratory morbidity, and is associated with increased bronchial responsiveness in children. To evaluate the effect of smoking by a parent on asthma symptoms, atopy, and airway hyperresponsiveness (AHR), we conducted a cross-sectional survey of 503 schoolchildren that involved questionnaires, spirometry, allergy testing, and a bronchial challenge test. If the PC20 methacholine was less than 16 mg/mL, the subject was considered to have AHR. The prevalence of a parent who smoked was 68.7%. The prevalence of AHR was 45.0%. The sensitization rate to common inhalant allergens was 32.6%. Nasal symptoms such as rhinorrhea, sneezing, nasal itching, and nasal obstruction were present in 42.7%. Asthma symptoms such as cough and wheezing were present in 55.4%. The asthma symptoms were significantly more prevalent in children who had a parent who smoked than in those whose parents did not. The nasal symptoms, atopy, and AHR did not differ according to whether a parent smoked. In a multiple logistic regression model, the asthma symptoms and atopy were independently associated with AHR, when adjusted for confounding variables. Passive smoking contributed to asthma symptoms in schoolchildren and was not an independent risk factor of airway hyperresponsiveness in an epidemiological survey. [References: 19]

Publication Type
Article

Citation 46.

Authors

Schelleman H. Klungel OII, Kromhout D. de Boer A. Stricker BIICH. Verschuren WMM.

Title

Prevalence and determinants of undertreatment of hypertension in the Netherlands

Source

Journal of Human Hypertension. 18(5):317-324, 2004 May.

Abstract

The objective of this study was to determine the prevalence, treatment, and control of hypertension, and the determinants of undertreatment in the Dutch population. The study design was cross-sectional. A population-based survey on cardiovascular disease risk factors in the Netherlands from 1996 to 2002 was the setting of the study. A total of 10 820 men and women, aged 30 - 59 years, were included in the study. The main outcome measures of the study were: Prevalence of hypertension, treatment, and control of hypertension and determinants of undertreatment of hypertension. Hypertension was defined as: systolic blood pressure (SBP) greater than or equal to 140 mmHg and/or diastolic blood pressure (DBP) greater than or equal to 90 mmHg, and/or the use of antihypertensive medication. Treated and controlled hypertension was defined as SBP <140 mmHg and DBP <90 mmHg. Multivariate logistic regression was used to assess the determinants of undertreatment. The prevalence of hypertension in men was 21.4% and in women 14.9%, and 17.9% of the hypertensive men and 38.5% of the hypertensive women were receiving antihypertensive medication. Of the untreated hypertensives, 21.9% of the men and 13.6% of the women were eligible for treatment with antihypertensive medication according to Dutch guidelines. Female gender and the use of cholesterol-lowering medication were associated with an increased chance of being treated. Subjects who were physically active, on a low salt diet, and current smokers had an increased chance of being untreated. Taking cholesterol-lowering medication and no asthma or allergy were factors associated with better control of blood pressure. In conclusion, a considerable proportion of hypertensives were untreated and uncontrolled. Therefore, the detection and control of hypertension in the Netherlands needs to improve. Several groups of hypertensives were identified that need additional care and attention. [References: 38]

Publication Type

Article

Citation 47.

Authors

Rose KM. North K. Arnett DK. Ellison RC. Hunt SC. Lewis CE. Tyroler HA.

Title

Blood pressure and pulse responses to three stressors: associations with sociodemographic characteristics and cardiovascular risk factors

Source

Journal of Human Hypertension. 18(5):333-341, 2004 May.

Abstract

Cardiovascular reactivity is hypothesized to increase the risk of hypertension and other CVD-related conditions. However, studies to date are inconclusive. We compared the association of blood pressure and pulse responses to three stressors (postural challenge, handgrip test, mental arithmetic) with sociodemographic characteristics and CVD risk factors. We included 782 participants from the Hypertension Genetic Epidemiology Study. Blood pressure and pulse responses to stressors were defined as the difference between post- and pre-stress measurements. Stepwise regression analyses examined change in SBP and pulse in response to stressors as a

function of sociodemographic and CVD risk factors. Age, race, and gender were forced into models and other variables (education, BMI, waist circumference, resting SBP and DBP, cigarette smoking, LDL and HDL cholesterol, glucose, and antihypertensive medications (beta-blockers, calcium channel blockers, diuretics, ace inhibitors)) were retained if $P < 0.10$. Age was a significant predictor of SBP response to all stressors. The SBP response to a change in posture was not related to other variables. The SBP response to mental arithmetic was significantly higher among men, those with larger waists, higher SBP, beta-blocker users, and lower among smokers. SBP response to the handgrip was significantly higher among those with higher SBP and beta-blocker users. Similarly, the association of the pulse response to the risk factors varied considerably across the stressors. Overall, the socio-demographic and CVD risk factors accounted for between 9 and 14% of the variance in the SBP response to the stressors and from between 4 and 12% of the variance in the pulse response to the three stressors. The associations between sociodemographic and CVD risk factors and the SBP and pulse response to stress were modest and inconsistent across stressors. The findings suggest that cardiovascular reactivity is a concept that needs to be defined in reference to specific stressors so that mechanisms leading to responses can be better understood. [References: 35]

Publication Type

Article

Citation 48.

Authors

Yamada Y. Noborisaka Y. Ishizaki M. Tsuritani I. Honda R. Yamada S.

Title

Alcohol consumption, homeostasis model assessment indices and blood pressure in middle-aged healthy men

Source

Journal of Human Hypertension. 18(5):343-350, 2004 May.

Abstract

A total of 1595 middle-aged healthy men consuming alcohol up to 120 ml per day and 538 without alcohol consumption were recruited from an occupational population, and their insulin resistance (IR) and beta-cell function (BC) were measured using the homeostasis model assessment (HOMA-IR and HOMA-BC), and the associations with alcohol consumption, blood pressure (BP), and serum gamma-glutamyltransferase (GGT) levels were analysed cross-sectionally. Both HOMA-IR and HOMA-BC were decreased with increasing alcohol consumption, but HOMA-BC corresponding to a level of HOMA-IR was 4 - 10 and 8 - 20% lower in drinkers consuming less than 60 ml of alcohol per day and those consuming more, respectively, than in nondrinkers, suggesting an altered fasting serum insulin - glucose relationship in alcohol consumers. Although BP was higher and HOMA-IR was lower in alcohol consumers than in nonconsumers, BP was higher at higher HOMA-IR irrespective of alcohol consumption. Elevations of serum GGT were positively associated with BP and HOMA-IR in both alcohol consumers and nonconsumers. Multiple regression analyses in the subjects showed that elevated serum GGT was an independent contributor to HOMA-IR elevations, and both serum GGT and HOMA-IR were significantly related to BP elevations after adjusting for alcohol consumption, age, body mass index, cigarette consumption, and physical activity at leisure. Although cross-sectional observations do not provide evidence of causal association, the results suggest that elevated serum GGT in alcohol consumers relates to elevations of IR and that the elevated insulin resistance relates, at least partly, to BP elevations in alcohol consumers. [References: 35]

Publication Type

Article

Citation 49.

Authors

Nishino Y. Suzuki Y. Ohmori K. Hozawa A. Ogawa K. Kuriyama S. Tsubono Y. Shibuya D. Tsuji I. Fukao A. Hisamichi S.

Title

Cancer incidence profiles in the Miyagi Cohort Study

Source

Journal of Epidemiology. 14(Suppl 1):S7-S11, 2004 Feb.

Abstract

BACKGROUND: There were few prospective cohort studies in Japan using cancer incidence as an endpoint.

METHODS: We conducted a baseline survey with two self-administered questionnaires regarding lifestyle and personality on the residents aged 40 to 64 years in 14 municipalities of Miyagi Prefecture, Japan, during June through August, 1990. Out of the eligible 51,921 residents, 47,605 (91.7%) responded to the lifestyle questionnaire and formed the cohort under study. We collated the list of subjects in the cohort with the Miyagi Prefectural Cancer Registry data through December 31, 1997. To identify the same person between two data, we used four personal characteristics (sex, name, birthday, and municipality of dwelling).

RESULTS: We ascertained 1,718 cases of incident cancer. In men, gastric cancer was the leading site of cancer (27.7%), followed by lung cancer and colon cancer. In women, breast cancer was the most common (119.6%), followed by gastric cancer and colon cancer.

CONCLUSIONS: By record linkage with regional cancer registry data, it becomes possible for us to investigate the effect of various life-styles on cancer incidence in the Miyagi Cohort Study. We expect this data to contribute to the progress of research on cancer etiology and cancer prevention. [References: 13]

Publication Type
Article

Citation 50.

Authors

Nakaya N. Kurashima K. Yamaguchi J. Ohkubo T. Nishino Y. Tsubono Y. Shibuya D. Fukudo S. Fukao A. Tsuji I. Hisamichi S.

Title

Alcohol consumption and mortality in Japan: The Miyagi Cohort Study

Source

Journal of Epidemiology. 14(Suppl 1):S18-S25, 2004 Feb.

Abstract

BACKGROUND: We examined the association between alcohol consumption and all-cause mortality in Japanese men and women.

METHODS: From June through August 1990, a total of 39,076 subjects (20,660 men and 18,416 women) in 14 municipalities of Miyagi Prefecture in rural northern Japan (40-64 years of age) completed a self-administered questionnaire that included information about alcohol consumption and various health habits. During 11 years of follow-up, we identified 1,879 deaths (1,335 men and 544 women). We used Cox proportional-hazards regression to estimate relative

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risk (FIR) of all-cause mortality according to categories of alcohol consumption and to adjust for age, education, marital status, past histories of chronic diseases, body mass index, smoking, walking and dietary variables.

RESULTS: Among men, the risk for all-cause mortality was significantly higher in past drinkers than never-drinkers (multivariate RR, 1.86; 95% confidence interval [CI], 1.50-2.29). There was a dose-response association between alcohol consumption and the risk of all-cause mortality among current drinking men: multivariate RRs in reference to never-drinkers (95% CI) were 1.10 (0.90-1.33), 1.17 (0.96-1.42), 1.16 (0.96-1.40), and 1.62 (1.32-1.99) in current drinkers who consumed less than 22.8 g, 22.8-45.5 g, 45.6-68.3 g, and 68.4 g or more alcohol per day, respectively (P for trend<0.001). Similar association was observed among women (P for trend=0.005).

CONCLUSIONS: The results indicated that alcohol consumption tended to be associated with linear increase in risk of all-cause mortality among Japanese men and women, and the association was remarkable for younger men. [References: 38]

Publication Type
Article

Citation 51.

Authors

Fujita K. Takahashi H. Miura C. Ohkubo T. Sato Y. Uga Jin S. Kurashima K. Tsubono Y. Tsuji I. Fukao A. Hisamichi S.

Title

Walking and mortality in Japan: The Miyagi Cohort Study

Source

Journal of Epidemiology. 14(Suppl 1):S26-S32, 2004 Feb.

Abstract

BACKGROUND: Although many studies in western populations demonstrated that time spent walking was associated with a reduced risk of all-cause mortality, data on Japanese has been sparse.

METHODS: In 1990, 20,004 men and 21,159 women in Miyagi Prefecture in rural northern Japan (40-64 year of age) completed a self-administered questionnaire including a question on time spent walking. Cox regression was used to estimate relative risk (RR) of mortality according to three levels of walking (30 minutes or less, between 30 minutes and one hour, and one hour or more), with adjustment for age, education, marital status, past history of diseases, smoking, drinking, body mass index, and dietary variables. During 11 years of follow-up, 1,879 subjects had died.

RESULTS: Time spent walking was inversely associated with risk of all-cause mortality: compared with men and women who walked one hour or more per day, multivariate RR (95% confidence intervals) was 1.06 (0.95-1.19) for subjects who walked between 30 minutes and one hour per day, and 1.16 (1.04-1.29) for subjects who walked 30 minutes or less per day (P for trend=0.007). Shorter duration of walking was associated with increased mortality among men who were never smokers (P for trend=0.081) and past smokers (P for trend=0.026), but not among currently smoking men (P for trend=0.751). We observed similar effect modification for women.

CONCLUSIONS: Time spent walking was associated with a reduced risk for all-cause

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mortality, especially among nonsmoking men and women. [References: 19]

Publication Type
Article

Citation 52.

Authors

Kocasoy G. Yalin H.

Title

Determination of carboxyhemoglobin levels and health effects on officers working at the Istanbul bosphorus bridge

Source

Journal of Environmental Science & Health Part A-Toxic/Hazardous Substances & Environmental Engineering. 39(4):1129-1139, 2004.

Abstract

Urban air pollution is a problem throughout the world. Carbon monoxide (CO), one of the major air pollutants, is an odorless, colorless, tasteless, and toxic gas, which is mainly produced by incomplete combustion of the fossil fuels such as gasoline and kerosene. The main outdoor sources of CO gas are vehicle exhausts, industrial effluents, and fires. When inhaled CO gas causes occupational hazards especially on workers who work at the junctions of heavy traffic roads and at the inefficiently ventilated closed areas such as parking garages and car repair shops. The purpose of this research was to determine the relation between carboxyhemoglobin (COHb) and CO levels and its health effects on cashiers working at the Istanbul Bosphorus Bridge. In the research the carbon monoxide and carboxyhemoglobin levels in the alveolar air of the numbers of the test group and the control group were measured and a questionnaire consisting of questions related to the personal information, their habits as smoking or not smoking and the health conditions of the test and control group members were filled by interviewing them. The data obtained was analyzed by using Microsoft Excel Table Graphic Program, Chi-Square (2) Test and the Student-t Test. The results indicated that smokers are affected more by the CO than the nonsmokers. [References: 13]

Publication Type
Article

Citation 53.

Authors

Leigh JP. Schembri M.

Title

Instrumental variables technique: cigarette price provided better estimate of effects of smoking on SF-12

Source

Journal of Clinical Epidemiology. 57(3):284-293, 2004 Mar.

Abstract

Objective: Debate surrounds the usefulness of the instrumental variables (IV) technique for medical research. The choice of an instrument for the technique has been contentious. This study estimated the effects of smoking on physical functional status. We chose an especially valid and strong instrument: cigarette price.

Study Design and Setting: The data were a nationally representative cross-sectional sample of 34,288 persons aged 30 to 91 in 1996-1997. The sample was drawn from the Community Tracking Study. Number of cigarettes smoked per day was predicted by the average cigarette

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price for the state in which the subject resided. The outcome measure was physical functional status and was measured by the SF-12 physical functional index.

Results: In multivariable models we found the following: cigarettes per day was strongly and negatively associated with the SF-12 index ($P < .001$); cigarette price was strongly and negatively associated with cigarettes per day ($P = .002$); the predicted cigarettes per day (the IV) was strongly and negatively associated with the SF-12 index in linear regression and tobit regression ($P = .047$ and $P = .021$).

Conclusion: Estimated coefficients from the IV method suggested that the effect of smoking on physical functional status was substantially larger than estimates that relied on conventional methods. (C) 2004 Elsevier Inc. All rights reserved. [References: 54]

Publication Type
Article

Citation 54.

Authors

McCloskey E. Selby P. Davies M. Robinson J. Francis RM. Adams J. Kayan K. Beneton M. Jalava TI. Pylkkanen L. Kenuaali J. Aropuu S. Kanis JA.

Title

Clodronate reduces vertebral fracture risk in women with postmenopausal or secondary osteoporosis: Results of a double-blind, placebo-controlled 3-year study

Source

Journal of Bone & Mineral Research. 19(5):728-736, 2004 May.

Abstract

The efficacy of oral clodronate 800 mg daily to reduce vertebral fractures was studied in 593 women with postmenopausal or secondary osteoporosis. The incidence of vertebral fractures was significantly reduced by 46%. The effect was not modified by the underlying cause of osteoporosis or other baseline factors including bone mineral density, QUS, weight, and smoking. [References: 38]

Publication Type
Article

Citation 55.

Authors

Gerot IL. Demondion X. Louville AB. Delcambre B. Cortet B.

Title

Subchondral fractures of the femoral head: a review of seven cases [Review]

Source

Joint Bone Spine. 71(2):131-135, 2004 Mar.

Abstract

Objective. - To describe the main characteristics of subchondral fractures of the femoral head.

Case-Reports. - The seven patients, five women and two men, with a mean age of 50 years (37-76 years), presented with mechanical pain in the groin. Bone loss was the main risk factor. Two patients had postmenopausal osteoporosis (including one with a history of ovariectomy at 30 years of age), two had osteoporosis induced by glucocorticoid therapy given after transplantation (liver and allogeneic bone marrow, respectively), one had an ACTH-producing adenoma, and one had femoral osteopenia at a site of topical glucocorticoid therapy for atopic dermatitis. The

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remaining patient had osteopenia and a history of smoking. Phosphate and calcium levels were normal in five patients. One patient had isolated hypocalciuria and another had moderate proximal tubular disease with phosphate wasting and hypercalciuria. Magnetic resonance imaging (MRI) disclosed a subcapital line of low signal on T1- and T2-weighted sequences surrounded by an area of variable size generating low signal on T1 images and high signal on T2 images, with postgadolinium enhancement, denoting marrow edema. Complete elimination of weight bearing for 6 weeks, symptomatic agents, and treatment of the underlying causes of bone insufficiency were used in all seven patients. Mean follow-up was 2.4 years (range, 11-39 years). No cases of osteonecrosis were recorded.

Conclusion. - Several cases of subchondral fracture have been reported in the literature. Bone insufficiency was the main risk factor in all the patients. (C) 2004 Elsevier SAS. All rights reserved. [References: 19]

Publication Type
Review

Citation 56.

Authors

Cipollone F, Toniato E, Martinotti S, Fazio M, Iezzi A, Cuccurullo C, Pini B, Ursi S, Vitullo G, Averna M, Arca M, Montali A, Campagna F, Uchino S, Spigonardo F, Taddei S, Viridis A, Ciabattini G, Notarbartolo A, Cuccurullo F, Mezzetti A.

Title

A polymorphism in the cyclooxygenase 2 gene as an inherited protective factor against myocardial infarction and stroke

Source

JAMA. 291(18):2221-2228, 2004 May 12.

Abstract

Context Myocardial infarction (MI) and ischemic stroke are thought to be caused by matrix digestion by metalloproteinases (MMPs) leading to rupture of atherosclerotic plaques. Production of macrophage MMP-2 and MMP-9 is induced by cyclooxygenase 2 (COX-2) and prostaglandin E₂ synthesis. Although COX-2 expression may be genetically determined, the relation between COX-2 polymorphisms and the risk of MI and stroke is unclear.

Objective: To investigate the relationship between the -765G→C polymorphism of the COX-2 gene and clinically evident plaque rupture.

Design, Setting, and Participants: Prospective, matched case-control study conducted between March 2002 and October 2003 among 864 patients with first MI or atherothrombotic ischemic stroke and 864 hospitalized controls. The groups were matched for age, sex, body mass index, smoking, hypertension, hypercholesterolemia, and diabetes. The -765G→C variant of the COX-2 gene was genotyped by restriction endonuclease digestion of polymerase chain reaction products.

Main Outcome Measures: Presence of the -765G→C polymorphism of the COX-2 gene; COX-2, MMP-2, and MMP-9 expression and activity in plaques and in peripheral monocytes; urinary 6-keto PGF(1α) (marker of endothelial prostacyclin); and endothelium-dependent and -independent forearm blood flow vasodilation.

Results: The prevalence of -765GC was 2.41 times higher among controls than among cases (43.3% vs 17.9%; $P < .001$). The prevalence of -765CC homozygosity was 5.81 times higher

(6.4% vs 1.1%; $P = .04$). Among participants carrying the -765GC and -765CC genotypes, the prevalence ratios for MI or stroke were 0.48 (95% CI, 0.36-0.68) and 0.33 (95% CI, 0.24-0.55), respectively. Expression of COX-2 and MMPs was significantly lower in atherosclerotic plaques from participants carrying the -765C allele, while the -765G&RARR;C polymorphism did not affect endothelial prostacyclin biosynthesis or endothelium-dependent vasodilation in vivo. In subgroup analyses ($n = 224$ cases), serum high-sensitivity C-reactive protein was significantly lower in patients carrying the -765C allele (mean [SD], 0.78 [0.1] vs 2.56 [0.4] mg/L; $P = .04$).

Conclusions: We found that the -765G&RARR;C polymorphism of the COX-2 gene is associated with a decreased risk of MI and stroke. Detection of this genotype may be useful for predicting genetic risk of MI and stroke. [References: 33]

Publication Type
Article

Citation 57.

Authors

Lyngdorf P, Hemmingsen J.

Title

Epidemiology of erectile dysfunction and its risk factors: a practice-based study in Denmark

Source

International Journal of Impotence Research. 16(2):105-111, 2004 Apr.

Abstract

The objective of this study was to estimate the prevalence of erectile dysfunction (ED) and its health-related correlates among Danishmen, to evaluate the influence of age, tobacco smoking, educational level and medication and the needs for treatment and willingness to be treated. A validated questionnaire was sent to 4310 noninstitutionalized Danish men, aged 40-80 y. The men selected constituted all male patients aged 40-80 y in 12 general practitioner practices in a county of Zealand, representing both the urban and rural population. Besides age, education, marital status and International Index of Erectile Function, the questionnaire included the duration of sexual problems (ED, premature ejaculation, penile curvature), comorbidity, medication, risk factors and the effect of prior treatment and willingness to seek treatment for sexual problems. A total of 2210 men responded, giving a response rate of 51.3%. No difference in the response rate by age groups was noted. The prevalence of complete ED increased with increasing age: 40-45 y, ED: 4.5%; 50-55 y, ED: 11.1%; and 75-80 y ED: 52%. The frequency of ED increased three-fold from men without comedication to men having some kind of medical treatment. Risk factors included tobacco smoking and low educational level. Only 9% suffering from ED had received some kind of treatment. Of the treated men, 75% were satisfied with the treatment. Willingness to discuss sexual matters depended both upon the age of the man and his actual erectile function. Taboos were seen more frequently among elderly people. ED increases with age, but only 10% of the men with sexual problems seek advice. Medication predisposes to ED. [References: 29]

Publication Type
Article

Citation 58.

Authors

Vardi Y, Gruenwald I, Gedalia U, Nassar S, Engel A, Har-Shai Y.

Title

Evaluation of penile revascularization for erectile dysfunction: a 10-year follow-up

Source

International Journal of Impotence Research. 16(2):181-186, 2004 Apr.

Abstract

The objective of this study was to report long-term success rates for penile revascularization (PR) and investigate factors responsible for failures. During the past 10 y, data were obtained on 52 patients who underwent PR. Surgical technique was selected according to preoperative arteriographic findings. The mean age was 28.5 y and the mean follow-up was 70.8 months. Success was defined as satisfactory intercourse without additional therapy. Overall success was 48%. Patients under 28 y showed a 73% success rate vs 23% in the older ones ($P=0.0003$). Nonsmokers had a 57% success compared to 29% in smokers ($P=0.05$). The presence of venous leak and type of procedure had an insignificant impact on success ($P=0.33$ and 0.23 respectively). To conclude, this curative treatment option is limited to a selective population with vasculogenic erectile dysfunction. We found that the cure rate of this procedure is maintained and long-term follow-up shows good results, especially in the young nonsmokers. [References: 27]

Publication Type
Article

Citation 59.**Authors**

Nkondjock A. Ghadirian P.

Title

Dietary carotenoids and risk of colon cancer: Case-control study

Source

International Journal of Cancer. 110(1):110-116, 2004 May 20.

Abstract

Some epidemiological studies suggest that consumption of fruits and vegetables with a high carotenoid content may protect against colon cancer (CC). The evidence, however, is not completely consistent. Given the inconsistencies in findings in previous studies and continued interest in identifying modifiable risk factors for CC, a case-control study of French-Canadian in Montreal, Canada, was undertaken to examine the possible association between dietary carotenoids and CC risk and to investigate whether this association varies in relation to lifestyle factors such as smoking or diet, and particularly the high consumption of long-chain polyunsaturated fatty acids (LCPUFA). A total of 402 colorectal cases (200 males and 202 females) and 688 population-based controls matched for age, gender and place of residence were interviewed. Dietary intake was assessed through a validated food frequency questionnaire that collected information on over 200 food items and recipes. Odds ratios (ORs) and 95 confidence intervals (CIs) were calculated in unconditional logistic regression models. After adjustment for important variables such as total energy intake, no association was found between dietary intake of carotenoids and CC risk. For women with high intakes of LCPUFA, an inverse association was found between lutein + zeaxanthin and CC risk. ORs were 0.41; 95%CI (0.19-0.91), $p=0.03$ for eicosapentaenoic acid, and OR=0.36, 95%CI (0.19-0.78), $p=0.01$ for docosahexaenoic acid, when the upper quartiles of intake were compared to the lower. Among never-smokers, a significantly reduced risk of CC was associated with intake of beta-carotene [OR=0.44, 95%CI (0.21-0.92) and $p=0.02$], whereas an inverse association was found between lycopene intake and CC risk [OR=0.63, 95%CI (0.40-0.98) and $p=0.05$] among smokers. The results of our study suggest that a diet rich in both lutein + zeaxanthin and LCPUFAs may help prevent CC in French-Canadian females. (C) 2004 Wiley-Liss, Inc. [References: 46]

Publication Type
Article

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6/23/2004

Citation 60.**Authors**

Smith CJ. Levy I. Sabin CA. Kaya E. Johnson MA. Lipman MCI.

Title

Cardiovascular disease risk factors and antiretroviral therapy in an HIV-positive UK population

Source

HIV Medicine. 5(2):88-92, 2004 Mar.

Abstract

Aim Although the benefits of antiretroviral therapy (ART) have been dramatic, studies have started to report a variety of drug-related side effects and toxicities. We sought to characterize the risk factors for cardiovascular disease present in an HIV-positive population.

Methods A total of 394 HIV-positive ambulant patients attending the Royal Free Hospital, London, were asked to complete a questionnaire. Questions focused on smoking habits and general health.

Results In total, 34% of patients were aged > 40 years, 29% had a family history of heart disease, 3% had diabetes, 14% suffered from raised blood pressure, 20% had a body mass index (BMI) > 26 kg/m², 7% had an alcohol consumption above the recommended UK limit, and 18% had total cholesterol levels > 6.3 mmol/L. The rate of smoking observed (45%) was much higher than that observed amongst the general population in the British Health Survey for England (34%). There were significant differences between those receiving and not receiving ART. Those on ART tended to be younger ($P < 0.0001$) and less likely to smoke cigarettes ($P = 0.06$) or have an alcohol consumption above the recommended limit ($P = 0.08$), but were more likely to have diabetes ($P = 0.05$). More patients receiving ART reported, and so perceived themselves to have, raised blood fats ($P < 0.0001$). This was confirmed when considering blood lipid levels, where those on ART had significantly raised total cholesterol levels compared to those not currently receiving ART ($P < 0.0001$).

Conclusion We have demonstrated an excess of cardiovascular risk factors in this cohort. These issues must be addressed if we wish to maintain the benefit of treating HIV infection. [References: 18]

Publication Type
Article

Citation 61.**Authors**

Burke M. Furman A. Hoffman M. Marmor S. Blum A. Yust I.

Title

Lung cancer in patients with HIV infection: is it AIDS-related?

Source

HIV Medicine. 5(2):110-114, 2004 Mar.

Abstract

HIV-infected individuals have an increased risk of malignancy, especially non-Hodgkin's lymphoma and Kaposi's sarcoma. Recently, several workers have noted a raised prevalence of lung cancer in HIV-positive subjects. We describe the diagnosis and clinical course for four HIV-seropositive patients who presented with lung cancer. All of the patients were young and were heavy smokers. They were all on highly active antiretroviral therapy (HAART), although

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the adherence varied from poor to excellent. The CD4 cell counts of these patients ranged from 200 to 686 cells/ μ L and their viral loads ranged from undetectable to 29 000 HIV-1 RNA copies/mL. After initial diagnosis of HIV infection between 5 and 13 years previously, they all presented with advanced lung cancer, with a very short clinical course, and all four died within 2-9 months of diagnosis. A comparison of the incidence of lung cancer in patients with HIV infection at our centre with that in the general population suggests that there is an increased prevalence in the HIV-infected patients. We review the literature and discuss whether lung cancer in HIV infection is coincidental or related to the primary disease. [References: 36]

Publication Type
Article

Citation 62.

Authors

Murphy RT, Foley LB, Tome MT, Mulvihill MT, Murphy A, McCarroll K, Crean P, Walsh MJ.

Title

Vitamin E modulation of C-reactive protein in smokers with acute coronary syndromes

Source

Free Radical Biology & Medicine. 36(8):959-965, 2004 Apr 15.

Abstract

Acute coronary syndromes are characterized by the expression of proinflammatory cytokines such as C-reactive protein (CRP). Sustained upregulation of inflammatory markers is associated with an adverse prognosis. Vitamin E is known to have significant anti-inflammatory properties and has been associated with a reduction in cardiovascular events in some studies of high-risk patients. The mechanism of benefit remains controversial. We conducted a randomized, double-blind placebo controlled trial of vitamin E 400 IU daily for 6 months in 110 patients with acute coronary syndromes. Serum samples were collected at enrollment and at 2, 4, and 6 months. CRP, interleukin-6 and the soluble cell adhesion molecules were measured. Vitamin E levels increased significantly in the treatment group (from 31 μ mol/L at baseline to 51 μ mol/L, $p < .0001$) and were unchanged in the placebo group (32 μ mol/L at baseline to 34 μ mol/L, $p = \text{NS}$). CRP levels fell in both the vitamin E group and the placebo group over the treatment period (from 17.2 \pm 2.9 to 6.1 \pm 0.8 mg/L and from 21.5 \pm 4.9 to 5.9 \pm 0.9 mg/L, $p = \text{NS}$ for the difference between active and placebo groups). However, vitamin E treatment was associated with significantly lower 6 month CRP levels in smokers versus smokers on placebo (4.7 \pm 0.71 mg/L vs. 8.26 \pm 1.5 mg/L, $p = .02$). Vitamin E reduces CRP levels in smokers with acute coronary syndromes for LIP to 6 months after hospitalization. (C) 2004 Elsevier Inc. All rights reserved. [References: 49]

Publication Type
Article

Citation 63.

Authors

Klonoff-Cohen H, Natarajan L.

Title

The Concerns During Assisted Reproductive Technologies (CART) scale and pregnancy outcomes

Source

Fertility & Sterility. 81(4):982-988, 2004 Apr.

Abstract

Objective: To determine whether concerns specific to IVF/GIFT (i.e., side effects, surgery,

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anesthesia, not enough information, pain, recovery, finances, missing work, and live birth delivery) that were measured by the previously validated Concerns During Assisted Reproductive Technologies (CART) instrument are negatively associated with reproductive endpoints.

Design: Prospective study.

Setting: Seven centers in Southern California between July 1993 and June 1998.

Patient(s): One hundred fifty-one women completed two questionnaires at baseline and at the time of the procedure.

Intervention(s): None.

Main Outcome Measure(s): Number of oocytes aspirated and fertilized, number of embryos transferred, pregnancy rates, and live birth delivery rates.

Result(s): At baseline, women who were concerned about the medical aspects (i.e., side effects, surgery, anesthesia, not enough information, pain, and recovery) of the procedure had 20% fewer oocytes retrieved and 19% fewer oocytes fertilized, while simultaneously adjusting for female age, race, education, smoking status, parity, type of assisted reproductive technologies (ART) procedure (IVF or GIFT), type of infertility, and number of previous attempts. Women who were very concerned about missing work had 30% fewer oocytes fertilized. For women who were moderately concerned about missing work, the odds ratio was 2.83 for not achieving a pregnancy. Women who were extremely concerned about the finances associated with the procedure had a very high risk (odds ratio [OR] = 11.62) of not achieving a successful live birth delivery.

Conclusion(s): The CART scale identified two areas of concerns for women undergoing IVF or GIFT: "missing work/finances" and "medical aspects of the procedure." (C) 2004 by American Society for Reproductive Medicine. [References: 31]

Publication Type
Article

Citation 64.

Authors

Pinto EM, Huppert FA, Morgan K, Brayne C.

Title

Neutrophil counts, monocyte counts and cardiovascular disease in the elderly

Source

Experimental Gerontology. 39(4):615-619, 2004 Apr.

Abstract

Background. Previous studies have reported on the association between white blood cell counts, in particular monocytes, and cardiovascular disease, but have predominantly been conducted on middle-aged men. We examined whether this association is sustained in an elderly population-based sample. Methods. Two samples of individuals aged 65 years and older living in Cambridge and Nottingham were recruited from the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS). Venepuncture was undertaken in 1046 individuals, excluding only those who had probable dementia or were physically frail. Monocyte, neutrophil, lymphocyte, eosinophil and basophil counts were analysed for possible associations with history

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of cardiovascular disease. Results. We found that monocyte and neutrophil counts were both significantly associated with history of cardiovascular disease, with respective odds ratios of 1.48 (95% CI 1.22-1.79) and of 1.44 (95% CI 1.19-1.75) per count tertile. These relationships remained significant on adjusting for age, sex, smoking and body mass index. We found no evidence of association between lymphocyte, eosinophil or basophil Counts and history of cardiovascular disease. Conclusions. Monocyte and neutrophil counts are both associated with cardiovascular disease in a relatively healthy elderly population. (C) 2004 Elsevier Inc. All rights reserved. [References: 18]

Publication Type
Article

Citation 65.

Authors

Hirvonen T. Tornwall ME. Pietinen P. Korhonen P. Albanes D. Virtamo J.

Title

Flavonol and flavone intake and the risk of intermittent claudication in male smokers

Source

European Journal of Epidemiology. 19(4):305-311, 2004 Apr.

Abstract

The objective of this study was to investigate the association between flavonol and flavone intake and the risk of intermittent claudication in male smokers. The study population consisted of participants of the Finnish alpha-Tocopherol, beta-Carotene Cancer Prevention (ATBC) Study, who were free of intermittent claudication at study entry. These 25,041 male smokers were 50 - 69 years old at baseline. Participants completed a validated dietary questionnaire at baseline. The occurrence of intermittent claudication was assessed by annual administration of the Rose questionnaire. During the median follow-up of 4.1 years, 2412 new cases of intermittent claudication were observed. Dietary intake of flavonols and flavones was inversely associated with the risk of intermittent claudication when adjusted for cardiovascular risk factors (relative risk, RR in the highest vs. lowest quintile of intake 0.86, 95% confidence interval, CI: 0.75 - 0.98, p for trend 0.007). However, after further adjustment for intakes of vitamins C and E and total carotenoids, the association was attenuated (RR: 0.93, 95% CI: 0.81 - 1.08, p for trend 0.12). The risk of intermittent claudication was lower among men in the highest quintile of vegetable consumption (RR: 0.78, 95% CI: 0.69 - 0.89, p for trend 0.0001) and among wine drinkers (RR: 0.63, 95% CI: 0.41 - 0.98). Adjustment for flavonol and flavone intake only marginally changed these associations. In conclusion, flavonol and flavone intake was not independently associated with the risk of intermittent claudication. [References: 36]

Publication Type
Article

Citation 66.

Authors

Beitz R. Mensink GBM. Hintzpete B. Fischer B. Erbersdobler HF.

Title

Do users of dietary supplements differ from nonusers in their food consumption?

Source

European Journal of Epidemiology. 19(4):335-341, 2004 Apr.

Abstract

The objective of the study was to analyse macronutrient and food intakes of regular users (310 men, 495 women) and nonusers (1136 men, 1269 women) of vitamin and mineral supplements,

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aged 18 - 79 years. These, were participants of the German Nutrition Survey, which was part of the German National Health Interview and Examination Survey 1998. Information on dietary behaviour including supplementation habits was assessed using a validated computerised dietary history method (DISHES 98). There were no major differences in macronutrient intakes between regular users and nonusers. After adjustment for age, energy intake, smoking, sport activity, socio-economic status and East/West German residence, regular supplement use was associated with a higher consumption of drinking water. Among men, a higher consumption of vegetable fat, poultry and fruit/vegetable juice, and among women, a higher consumption of fish, milk products, fruits and tea was also associated with regular supplement use. An inverse association was observed between regular supplement use and the consumption of coffee among women. Significant differences in food consumption between regular users and nonusers were observed, indicating a tendency for a healthier food choice among regular users. [References: 23]

Publication Type
Article

Citation 67.

Authors

Lin YS. Chu NF. Wu DM. Shen MH.

Title

Prevalence and factors associated with the consumption of betel-nut among military conscripts in Taiwan

Source

European Journal of Epidemiology. 19(4):343-351, 2004 Apr.

Abstract

Objective: This study evaluates the prevalence of betel-nut chewing among military personnel stationed on Taiwan's offshore islands. Furthermore, this study examines variables to identify which may predict a greater predilection toward betel-nut chewing among the conscript population studied. **Methods:** A cross-sectional mass screening was conducted of compulsory military service personnel stationed on Taiwan's offshore islands between August 1 and December 31, 2001. A total of 7574 military employees were included in this survey. Information regarding betel-nut chewing habits were ascertained using a standard structured questionnaire, which including the level and duration of betel-nut chewing as well as respondents' knowledge, attitude and practices with regard to consumption of this product. **Results:** Conscripts were found to be less likely to chew betel-nut regularly while performing military service. There are 1535 (20.3%) of respondents reporting to habitually chew betel-nut prior to active duty shrank to 1048 (13.8%) after going on active-duty. The most reasons to chew betel-nut among the recruits after military services are curiosity (33.3%) and as a stimulant (29.8%). About 46% of military employees who currently chew betel-nut report an interest to quit in the future. The risk factors for betel-nut chewing include individual factors (e. g., age, education, knowledge, and attitude toward betel-nut chewing), lifestyle habits (e. g., cigarette smoking), and familial factors (e. g., consumption of betel-nut by parents). More interesting, the recruits had the habit of cigarette smoking associated with increase risk for betel-nut chewing (OR: 7.18; 95% CI: 5.66-9.20). **Conclusions:** Although the military has made considerable progress in reducing betel-nut chewing on military campuses, the prevalence of betel-nut chewing is still relatively high and, in 2001, affected about one quarter of all military personnel stationed on the abovementioned offshore islands. In future efforts to lower betel-nut consumption among high risk groups, targeting the group of conscripted military personnel described in this study should be considered. [References: 19]

Publication Type
Article

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6/23/2004

Citation 68.**Authors**

Wachtershauser A. Stein J.

Title

Dietary recommendations in disorders of the lipid metabolism Part 1: Pathogenesis and influence of nutritional factors [German]

Source

Ernährungs-Umschau. 51(3):95-1, 2004 Mar.

Abstract

Disorders of the lipid metabolism are divided into hypercholesterolemia, hypertriglyceridemia and combined hyperlipidemia. They are the cause of various cardiovascular diseases and are greatly influenced by exogenous factors such as nutrition and lifestyle. It has been shown that an increased consumption of dietary fat in general, and a high intake of saturated fat in particular contribute to increased serum LDL cholesterol levels. A reduction of fat intake (max. 30 energy%) and fat modification (mono- and polyunsaturated instead of saturated fatty acids), replacement, to some extent, of fats by complex carbohydrates and use of soluble dietary fibre (pectin, psyllium or guar) and plant sterols which inhibit cholesterol absorption are appropriate means of reducing LDL cholesterol. Physical activity has a beneficial influence on HDL cholesterol. Although humans respond differently to reduced dietary cholesterol intake, high-cholesterol food (offal, eggs, shellfish and crustaceans) should be avoided and total intake of animal food be reduced. Replacement, to some extent, of animal protein by soy protein may further reduce LDL cholesterol. Consumption of products made of chemically hydrated fat (chocolate cream, confectionery, French fries) should be reduced because of their high content of trans-fatty acids. Few data are available about the use of phytochemicals. Substances with antioxidative properties (vitamins C and E, beta-carotene) protect against coronary heart disease. A nutritional therapy of patients with hypertriglyceridemia comprises a reduction of mono- and disaccharides, total abstinence from alcohol and use of omega-3 fatty acids. In general, a consequent change in lifestyle associated with a low-fat vegetarian or Mediterranean diet, normalization of weight, no smoking, stress management and physical activity should be recommended. In case of hyperlipidemia, pertaining recommendations should be combined. [References: 3]

Publication Type

Article

Citation 69.**Authors**

Maple-Brown LJ. Brimblecombe J. Chisholm D. O'Dea K.

Title

Diabetes care and complications in a remote primary health care setting

Source

Diabetes Research & Clinical Practice. 64(2):77-83, 2004 May.

Abstract

Prevalence of complications of type 2 diabetes in a remote Australian Indigenous community was measured as part of a population survey of risk factors for diabetes and cardiovascular disease. Information was obtained from history, clinical examination, blood sample and medical records. Forty-three diabetic participants (six newly diagnosed) were assessed from a sample of 339 (12% diabetes prevalence); mean age 50 (range 31-67), duration of diabetes 5.6 (0-15) years, 40% male. Risk factors/complications: 70% with BMI greater than or equal to 25, 50% cigarette

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smokers, HbA1c 8.5 (S.D. 2.9)%, cholesterol 4.8 (0.8) mmol/l, triglycerides 2.7 (1.6) mmol/l, HDL 0.83 (0.2) mmol/l; 60% had albuminuria (micro 38%, macro 22%), 47% were hypertensive, 7% (n = 2) had retinopathy, 24% had peripheral neuropathy, none had peripheral vascular disease, 14% had documented coronary vascular and one participant cerebrovascular disease. Of 37 with previously diagnosed diabetes: 43% were on aspirin, 65% on metformin, 80% with albuminuria on ACE inhibitors. Four additional diabetic participants (not studied) were receiving renal dialysis elsewhere. The results demonstrate on the one hand, very high indices of cardiovascular risk (smoking, hypertension, dyslipidaemia and albuminuria) and on the other, good quality primary health care providing good detection and follow up management of type 2 diabetic patients. (C) 2003 Elsevier Ireland Ltd. All rights reserved. [References: 20]

Publication Type

Article

Citation 70.**Authors**

Choi KM. Lee J. Lee KW. Seo JA. Oh JH. Kim SG. Kim NH. Choi DS. Baik SH.

Title

Comparison of serum concentrations of C-reactive protein, TNF-alpha, and interleukin 6 between elderly Korean women with normal and impaired glucose tolerance

Source

Diabetes Research & Clinical Practice. 64(2):99-106, 2004 May.

Abstract

This study was performed to compare concentrations of pro-inflammatory cytokines, such as interleukin 6 (IL-6), tumor necrosis factor alpha (TNF-alpha) as well as acute-phase protein, such as C-reactive protein (CRP) between subjects with normal glucose tolerance (NGT) and impaired glucose tolerance (IGT). The purpose of this study was to verify whether the pro-inflammatory cytokine-induced acute-phase response is a pathogenic mechanism in type 2 diabetes in elderly Korean women. A total of 1737 elderly subjects aged over 60 years participated in a population based study in Seoul, Korea (SWS Study 1999). Amongst them, a total of 232 non-smoking and non-diabetic female subjects aged 60-89 years was randomly selected and compared with each other. Higher serum high-sensitivity CRP (hs-CRP) concentrations were shown in subjects with IGT than those with normal glucose tolerance (median 1.2 versus 0.9, $P < 0.05$). Moreover, a relationship between serum hs-CRP concentrations and many components of the metabolic syndrome were detected. Serum pro-inflammatory cytokine IL-6 or TNF- α concentrations, however, were neither increased in subjects with IGT nor closely correlated with the components of the metabolic syndrome. In multiple regression analysis with stepwise selection method using hs-CRP as a dependent variable, it was found that white blood cell (WBC) counts, body mass index (BMI), fasting insulin, post-load 2 h glucose, hematocrit and LDL cholesterol were significant independent variables. Our study confirms that increased acute-phase reaction is associated with impaired glucose tolerance and the metabolic syndrome in elderly Korean women. However, the hypothesis that pro-inflammatory cytokine-induced systemic inflammation is an early metabolic defect prior to onset of type 2 diabetes, is not supported in our study of elderly Korean women. (C) 2003 Elsevier Ireland Ltd. All rights reserved. [References: 39]

Publication Type

Article

Citation 71.**Authors**<http://gateway2.ovid.com/ovidweb.cgi>

6/23/2004

Fernandez-Serra M. Consales C. Livigni A. Amone MI.

Title

Role of the ERK-mediated signaling pathway in mesenchyme formation and differentiation in the sea urchin embryo

Source

Developmental Biology. 268(2):384-402, 2004 Apr 15.

Abstract

Mesoderm and mesodermal structures in the sea urchin embryo are entirely generated by two embryologically distinct populations of mesenchyme cells: the primary (PMC) and the secondary (SMC) mesenchyme cells. We have identified the extracellular signal-regulated kinase (ERK) as a key component of the regulatory machinery that controls the formation of both these cell types. ERK is activated in a spatial-temporal manner, which coincides with the epithelial-mesenchyme transition (EMT) of the prospective PMCs and SMCs. Here, we show that ERK controls EMT of both primary and secondary mesenchyme cells. Loss and gain of function experiments demonstrate that ERK signaling is not required for the early specification of either PMCs or SMCs, but controls the maintenance and/or the enhancement of expression levels of regulatory genes which participate in the process of specification of these cell types. In addition, ERK-mediated signaling is essential for the transcription of terminal differentiation genes encoding proteins that define the final structures generated by PMCs and SMCs. Our findings suggest that ERK has a central pan-mesodermal role in coupling EMT and terminal differentiation of all mesenchymal cell types in the sea urchin embryo. (C) 2004 Elsevier Inc. All rights reserved. [References: 67]

Publication Type

Article

Citation 72.**Authors**

Tamul PC. Peruzzi WT.

Title

Assessment and management of patients with pulmonary disease

Source

Critical Care Medicine. 32(4 Suppl S):S137-S145, 2004 Apr.

Abstract

Objective. Often, the critically ill are not optimized in terms of their chronic diseases and are with little physiologic reserves.

Data Sources: This article contains a review of the pathophysiology of the major preexisting and chronic pulmonary disease encountered in the critically ill, such as asthma, emphysematous disease, and chronic bronchitis. It also includes a summary of other significant disease processes such as acute respiratory disease syndrome, cigarette smoking, and pulmonary alveolar proteinosis and the implications of obesity and obstructive sleep apnea. When confronted with critical illness, the morbidity is magnified. Close observation of patients for evidence that the underlying disease may complicate their pulmonary status, and vice versa, creates an environment where the whole patient can heal and recover from illness.

Conclusion: The aim of the intensive care unit team should be recognition of the patient at risk, use of necessary therapies (i.e., bronchodilators) as early as feasible, and treatment titrated to realistic endpoints as the acute illness progresses and subsequently resolves. [References: 56]

Publication Type

Article

<http://gateway2.ovid.com/ovidweb.cgi>

6/23/2004

Citation 73.**Authors**

Teo SK. Colburn WA. Tracewell WG. Kook KA. Stirling DI. Jaworsky MS. Scheffler MA. Thomas SD. Laskin OL.

Title

Clinical pharmacokinetics of thalidomide [Review]

Source

Clinical Pharmacokinetics. 43(5):311-327, 2004.

Abstract

Thalidomide is a racemic glutamic acid derivative approved in the US for erythema nodosum leprosum, a complication of leprosy. In addition, its use in various inflammatory and oncologic conditions is being investigated.

Thalidomide interconverts between the (R)- and (S)-enantiomers in Plasma, with protein binding of 55% and 65%, respectively. More than 90% of the absorbed drug is excreted in the urine and faeces within 48 hours. Thalidomide is minimally metabolised by the liver, but is spontaneously hydrolysed into numerous renally excreted products.

After a single oral dose of thalidomide 200mg (as the US-approved capsule formulation) in healthy volunteers, absorption is slow and extensive, resulting in a peak concentration (C-max) of 1-2 mg/L at 3-4 hours after administration, absorption lag time of 30 minutes, total exposure (AUC(infinity)) of 18 mg.h/L, apparent elimination half-life of 6 hours and apparent systemic clearance of 10 L/h. Thalidomide pharmacokinetics are best described by a one-compartment model with first-order absorption and elimination. Because of the low solubility of the drug in the gastrointestinal tract, thalidomide exhibits absorption rate-limited pharmacokinetics (the 'flip-flop' phenomenon), with its elimination rate being faster than its absorption rate. The apparent elimination half-life of 6 hours therefore represents absorption, not elimination. The 'true' apparent volume of distribution was estimated to be 16L by use of the faster elimination-rate half-life.

Multiple doses of thalidomide 200 mg/day over 21 days cause no change in the pharmacokinetics, with a steady-state C-max (C-max(ss)) of 1.2 mg/L. Simulation of 400 and 800 mg/day also shows no accumulation, with C-max(ss) of 3.5 and 6.0 mg/L, respectively. Multiple-dose studies in cancer patients show pharmacokinetics comparable with those in healthy populations at similar dosages.

Thalidomide exhibits a dose-proportional increase in AUC at doses from 50 to 400mg. Because of the low solubility of thalidomide, C-max is less than proportional to dose, and t(max) is prolonged with increasing dose.

Age, sex and smoking have no effect on the pharmacokinetics of thalidomide, and the effect of food is minimal. Thalidomide does not alter the pharmacokinetics of oral contraceptives, and is also unlikely to interact with warfarin and grapefruit juice. Since thalidomide is mainly hydrolysed and passively excreted, its pharmacokinetics are not expected to change in patients with impaired liver or kidney function. [References: 65]

Publication Type

Review

Citation 74.

<http://gateway2.ovid.com/ovidweb.cgi>

6/23/2004

Authors

Loeb MB.

Title

Use of a broader determinants of health model for community-acquired pneumonia in seniors

Source

Clinical Infectious Diseases, 38(9):1293-1297, 2004 May 1.

Abstract

Community-acquired pneumonia in older adults represents an important clinical and public health challenge. This article discusses the role that factors such as socioeconomic status, air pollution, crowding, exposure to tobacco smoke, and nutrition play in predisposing elderly persons to such respiratory infections. It is proposed that a model that addresses these factors is needed for a comprehensive understanding of these infections. Although the causal pathways may be unclear, there are data to suggest a relationship between low socioeconomic status and risk of acquiring respiratory infection. The need for more research in this area is emphasized. [References: 43]

Publication Type

Article

Citation 75.**Authors**

Zhu Y. Spitz MR. Zhang H. Grossman HB. Frazier ML. Wu XF.

Title

Methyl-CpG-binding domain 2 - A protective role in bladder carcinoma

Source

Cancer, 100(9):1853-1858, 2004 May 1.

Abstract

BACKGROUND. MBD2, a methyl-CpG-binding domain 2 protein, has attracted much attention because of its role in epigenetic regulation of gene expression. In addition to transcriptional repression, MBD2 has also been shown to catalyze demethylation by directly removing methyl groups from 5-methylcytosine residues in DNA. Although the demethylase activity of MBD2 remains controversial, reduction of MBD2 messenger RNA expression has been observed in various tumor tissue types. In the current case-control study, the authors investigated the association between MBD2 expression and bladder carcinoma risk.

METHODS. RNA was isolated from the peripheral blood lymphocytes of 98 bladder carcinoma case patients and 135 frequency-matched control patients. MBD2 expression was measured by real-time quantitative reverse transcription-polymerase chain reaction assays.

RESULTS. Overall, there was a significantly reduced risk associated with high levels of MBD2 expression (odds ratio [OR], 0.43; 95% confidence interval [CI], 0.21-0.90). This relation was maintained when the data were categorized according to quartile distribution for MBD2 expression (P for trend < 0.05). It is noteworthy that the protective effects were more apparent in women (OR, 0.25; 95% CI, 0.06-1.02) compared with men (OR, 0.58; 95% CI, 0.24-1.42), in older individuals (OR, 0.12; 95% CI, 0.03-0.45) compared with younger individuals (OR, 1.16; 95% CI, 0.40-3.33), and in heavier smokers (OR, 0.40; 95% CI, 0.18-0.93) compared with lighter smokers (OR, 0.71; 95% CI, 0.18-2.86).

CONCLUSIONS. Although the underlying molecular mechanisms remain unclear, the data obtained in the current study represent the first evidence demonstrating a protective role against bladder carcinoma risk for MBD2. MBD2 expression may prevent age-related, gender-related,

and smoking-induced hypermethylation, which are predisposing factors for tumor development. [References: 20]

Publication Type

Article

Citation 76.**Authors**

Peet M.

Title

Diet, diabetes and schizophrenia: review and hypothesis

Source

British Journal of Psychiatry, 184(Suppl 47):S102-S105, 2004 Apr.

Abstract

Background Diabetes is more common in people with schizophrenia than in the general population.

Aims To explore the possible reasons for the association between diabetes and schizophrenia.

Method Diet and other lifestyle factors in patients with schizophrenia were reviewed as risk factors for diabetes.

Results People with schizophrenia show features of the metabolic syndrome at the onset of illness, before treatment. They also eat a poor diet, take little exercise and have high rates of smoking. Food intake may be increased further by antipsychotic medication. Nutritional factors appear to have a key role in the development of diabetes in patients with schizophrenia and may also affect the outcome and severity of schizophrenia. A common pathway through which diet might contribute to the development of both diabetes and schizophrenia is proposed.

Conclusions Lifestyle factors may influence outcomes in both diabetes and schizophrenia. Lifestyle interventions are the key to improving the long-term health of people with schizophrenia.

Declaration of interest M.P. has received research funding and sponsorship from Laxdale Ltd, and sponsorship and lecture fees from Eli Lilly Co. [References: 52]

Publication Type

Article

Citation 77.**Authors**

Wielgus JJ. Downey LC. Ewald KW. Hatley ME. Wilson KC. Yeilding RH.

Title

Exposure to low concentrations of nicotine during cranial nerve development inhibits apoptosis and causes cellular hypertrophy in the ventral oculomotor nuclei of the chick embryo

Source

Brain Research, 1000(1-2):123-133, 2004 Mar 12.

Abstract

Maternal cigarette use during pregnancy is associated with increased incidence of neural impairments in offspring, but nicotine's unique contribution to any neuropathology remains unclear, and nicotine's neurodevelopmental effects assessed in animal models vary with

concentration. During ontogenesis, the chick oculomotor complex (OMN) is regulated by central nervous system (CNS) afferent-derived and target-derived trophic factors, allowing assessment of nicotine's potential interference in receptor-mediated CNS trophic phenomena, unconfounded by myriad other compounds in cigarette smoke. In the current Study, 100 ng nicotine applied daily in ovo to yolk during embryonic days (E) 1-7 mimicked maternal plasma nicotine concentrations during fetal cranial nerve development. Nicotine-treated embryos exhibited a 15% decrease in whole body weight and 7% decrease in brain weight at E16. However, at E16, nicotine-treated embryos had 37% and 15% increases in the combined ventromedial+lateral (v) OMN motoneuron density and soma area, respectively, effects not observed in the optic tectum, in which nicotine cholinergic receptor expression is delayed until E8-12. Incorporation of tritiated thymidine into Whole brain DNA demonstrated that the nicotine treatment did not cause increased rates of whole brain Mitosis, suggesting that the dosage regimen did not elicit a cytotoxic, wound-healing, response of differentiating cells. As determined by DNA fragment-labeling assay during the normal period of cell death, vOMN apoptosis occurs maximally on E11 during a normal period of declining cell density, and a dose-response study demonstrated 78% E11 vOMN apoptotic suppression at approximately 0.30 mM cumulative yolk nicotine with an inhibition threshold between 0.10 and 0.20 mM. These results suggest that plasma nicotine concentrations resulting from tobacco use or nicotine replacement therapy (NRT) are sufficient to inhibit motoneuron apoptosis and enhance neuronal growth. (C) 2004 Elsevier B.V. All rights reserved. [References: 48]

Publication Type
Article

Citation 78.

Authors

Coppola L. Grassia A. Coppola A. Tondi G. Petuso G. Mordente S. Gombos G.

Title

Effects of a moderate-intensity aerobic program on blood viscosity, platelet aggregation and fibrinolytic balance in young and middle-aged sedentary subjects

Source

Blood Coagulation & Fibrinolysis. 15(1):31-37, 2004 Jan.

Abstract

Regular physical activity is associated with reduced risk of cardiovascular disease although the mechanisms are unclear. Recent population-based studies suggest that the effect of physical activity may be at least partly a result of action on hemostasis. We tested the hypothesis that moderate-intensity aerobic training improves fibrinolytic activity and reduces platelet aggregation and blood viscosity. In 15 young (111 males and four females; age, 24-32 years) and 15 middle-aged (111 males and four females; age, 45-65 years) healthy, non-smoker, sedentary subjects, the maximum oxygen consumption, adenosine diphosphate-induced platelet aggregation, tissue plasminogen activator and plasminogen activator inhibitor type 1, antigen, hematocrit and blood viscosity were measured at baseline and after 12 weeks of aerobic exercise training (40 min three times a week at a training intensity adjusted to 60% of the individual heart rate reserve). After training, the maximum oxygen consumption was increased by 9% ($P < 0.01$) in the young group and by 7.3% ($P < 0.05$) in the middle-aged group. Adenosine diphosphate-platelet aggregation significantly decreased in the young ($\sim 30\%$; $P < 0.05$). The middle-aged group showed a 10.4% decrease in hematocrit ($P < 0.05$), and a 11.6 and 16.6% decrease in blood viscosity at 450/s and at 90/s rates of shear, respectively ($P < 0.05$), while the plasminogen activator inhibitor type 1 antigen plasma level increased 135% ($P < 0.01$). These data, some not consistent with others, only partially support the hypothesis that the beneficial effects of physical activity result from action on hemostatic balance. In particular, the changes in the fibrinolytic

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system in middle-aged subjects might suggest increased thrombotic risk. Thus a simple, straightforward conclusion is not possible at present, and further studies are required. (C) 2004 Lippincott Williams Wilkins. [References: 47]

Publication Type
Article

Citation 79.

Authors

Cauffiez C. Lo-Guidice JM. Quaranta S. Allorge D. Chevalier D. Cenee S. Hamdan A. Lhermitte M. Lafitte JJ. Libersa C. Colombel JF. Stucker I. Broly F.

Title

Genetic polymorphism of the human cytochrome CYP2A13 in a French population: implication in lung cancer susceptibility

Source

Biochemical & Biophysical Research Communications. 317(2):662-669, 2004 Apr 30.

Abstract

The human cytochrome CYP2A13, which is mainly expressed in the respiratory tract, has been shown to be highly efficient in vitro in the metabolism of tobacco-smoke carcinogens and procarcinogens such as 4-methylnitroso-1-(3-pyridyl)-1-butanone (NNK). In order to investigate the extent of CYP2A13 genetic polymorphism in a French Caucasian population of 102 individuals, a screening for sequence variations in the 5'-untranslated and protein encoding regions of its gene was performed using a polymerase chain reaction-single strand conformational polymorphism (PCR-SSCP) strategy. Six polymorphisms in the coding region were identified, including two rare missense mutations (C474G or Asp(158)Glu, G967T or Val(323)Leu) and one nonsense mutation (Arg(101)Stop). This deleterious mutation, the most frequent (5%) in our population, presumably encodes a severely truncated protein. The influence of the nonsense mutation in lung cancer susceptibility was examined by PCR-SSCP using peripheral blood DNA from 204 cases of lung cancer and 201 controls. The CYP2A13*7 allele, which harbours the C301T mutation, was present in 2.0% of controls and 3.4% of cases. However, multivariate analysis showed an elevated risk for small cell lung cancer in subjects heterozygous for the null allele (odds ratio OR = 9.9; 95% confidence interval CI = 1.9-52.2). This increased risk was not linked to other histological types of lung cancer. (C) 2004 Elsevier Inc. All rights reserved. [References: 39]

Publication Type
Article

Citation 80.

Authors

Westphal M. Morita N. Enkhbaatar P. Murakami K. Traber L. Traber DL.

Title

Acute effects of combined burn and smoke inhalation injury on carboxyhemoglobin formation, tissue oxygenation, and cardiac performance

Source

Biochemical & Biophysical Research Communications. 317(3):945-949, 2004 May 7.

Abstract

The objective Of this Study was to determine the relationship between carboxyhemoglobin (COHb) formation, global oxygen transport, and cardiac performance in the acute phase of combined burn and smoke inhalation injury. Following a third degree burn of 20% of the total body Surface area, adult sheep were subjected to cotton smoke (4 x 12 breaths) according to an

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established protocol. Compared with baseline (BL), the burn injury led to an immediate and sustained COHb-independent depression in myocardial contractility. Despite a progressive increase in COHb formation, Lip to a maximum of 78 \pm 3% ($P < 0.001$ vs BL), smoke inhalation did not further impair these hemodynamic changes. This study demonstrated that in the early stage of combined burn and smoke inhalation injury, the depression in cardiac function is basically triggered by the burn injury, whereas COHb generation secondary to cotton smoke exposure primarily contributes to pulmonary shunting. (C) 2004 Elsevier Inc. All rights reserved. [References: 18]

Publication Type
Article

Citation 81.**Authors**

Clotet J. Gomez-Arbonas X. Ciria C. Albalad JM.

Title

Spirometry is a good method for detecting and monitoring chronic obstructive pulmonary disease in high-risk smokers in primary health care [Spanish]

Source

Archivos de Bronconeumologia. 40(4):155-159, 2004 Apr.

Abstract

OBJECTIVE: Chronic obstructive pulmonary disease (COPD) is a common disease, the early diagnosis of which allows effective management and treatment. The aim of the present study is to show the effectiveness of a screening and monitoring plan for COPD in high-risk patients in primary health care.

PATIENTS AND METHODS: The subjects in this prospective observational longitudinal study comprised 164 high-risk smokers aged between 40 and 76 years. Age, sex, weight, height, and smoking habit (pack-years) were recorded and spirometry was performed according to the guidelines of the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR). Patients were informed of their results and given brief advice on how to stop smoking. After 3 years, the patients underwent the same evaluation.

RESULTS: In 1999, 22% of the smokers were diagnosed with COPD. Three years later, an additional 16.3% were diagnosed as having COPD, and the disease had worsened in 38.8% of those already diagnosed. Of the patients with a forced expiratory volume in one second (FEV1) less than 90%, 44.8% developed COPD (relative risk: 10.54). An accelerated decrease in FEV1 was found in 18.1% of the patients (20.7% with COPD and 9.0% without COPD).

Mean tobacco consumption in 1999 was 28.1 pack-years in subjects without COPD and 31.7 pack-years in those with COPD, whereas in 2002, consumption was 30.6 pack-years in patients with COPD and 31.9 pack-years in those without. In 3 years, 22.8% had stopped smoking (20.5% without COPD and 30.3% with COPD).

CONCLUSIONS: Many smokers managed to give up smoking after learning their spirometric results. FEV1 can identify smokers at greatest risk of developing COPD. Spirometric screening and monitoring of smokers at high risk in primary health care can identify those most susceptible to developing COPD while the disease is in an early phase. Therefore the most appropriate strategy can be adopted for each patient. [References: 10]

Publication Type
Article

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6/23/2004

Citation 82.**Authors**

Martinez C. Monso E. Quero A.

Title

Emerging pleuropulmonary diseases associated with asbestos inhalation [Review] [Spanish]

Source

Archivos de Bronconeumologia. 40(4):166-177, 2004 Apr.

Publication Type
Review

Citation 83.**Authors**

Lopez JL. Rodriguez JT. Navarro MET.

Title

Bronchial inflammation in smokers: Clarifying terms [Spanish]

Source

Archivos de Bronconeumologia. 40(4):191, 2004 Apr.

Publication Type
Letter

Citation 84.**Authors**

de Jonge GA. Lanting CI. Brand R. Ruys JH. Semmekrot BA. van Wouwe JP.

Title

Sudden infant death syndrome in child care settings in the Netherlands

Source

Archives of Disease in Childhood. 89(5):427-430, 2004 May 1.

Abstract

Background: In the Netherlands, there is a very low incidence of sudden infant death syndrome (SIDS) due to effective preventive campaigns.

Methods: During the period September 1996 to August 2002, nationwide 161 deaths from SIDS (about 85% of all cases of SIDS during that time) were investigated by the Cot Death Committee of the Dutch Paediatric Association.

Results and Discussion: Over 10% of cases of SIDS took place during some type of child care. From a national survey carried out in 2000/01 information was available on the child care attendance of 2000 Dutch infants aged 3 - 6 months. Based on the hours usually spent in child care by these infants, the number of similarly aged infants that died from SIDS while attending child care was 4.2 times higher than expected. Remarkably, the prevalence of known risk factors for SIDS, such as sleeping position and parental smoking, was favourable in the SIDS cases in child care settings. The adherence of child care facilities to the safe sleeping recommendations is high in the Netherlands, and no explanation as to why child care settings may be associated with an increased risk of SIDS is apparent. The possibility of other explanations, such as stress and change in routine care, is hypothesised. [References: 12]

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Article

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Citation 85.

Authors

Kojima S. Sakamoto T. Ishihara M. Kimura K. Miyazaki S. Tei CW. Hiraoka H. Sonoda M. Tsuchihashi K. Yamagishi M. Inoue T. Asada Y. Ikeda Y. Shirai M. Ogawa H.

Title

The white blood cell count is an independent predictor of no-reflow and mortality following acute myocardial infarction in the coronary interventional era

Source

Annals of Medicine. 36(2):153-160, 2004.

Abstract

BACKGROUND. In the era before the use of coronary reperfusion therapy, an elevated white blood cell (WBC) count was associated with a higher risk of adverse events following acute myocardial infarction (AMI). However, the relationship between WBC count and prognosis after AMI has not been investigated since coronary intervention was introduced.

AIM. To evaluate whether a high WBC count within 48 hours of the onset of AMI predicts future adverse events in patients undergoing percutaneous coronary intervention (PCI).

METHOD. We evaluated 1,016 patients who underwent PCI in the acute phase of MI using the Japanese Acute Coronary Syndrome Study (JACS) database.

RESULTS. WBC count was significantly associated with smoking, sudden onset AMI, and the no-reflow phenomenon during PCI, as were age, peak creatine kinase level, and Killip class. An elevated WBC count was significantly associated with higher risk of in-hospital mortality. Patients in the highest quartile of WBC count were about three times more likely to have a poor prognosis after AMI compared to those in the lowest quartile.

CONCLUSIONS. The WBC count is of great significance for stratifying patient risk and can be used as a universal marker for predicting future adverse events following any treatment for AMI. [References: 30]

Publication Type

Article

Citation 86.

Authors

Agudo A. Pera G. Rodriguez M. Quiros JR. Navarro C. Martinez C. Larranaga N. Fernandez A. Dorronsoro M. Chirlaque MD. Berenguer A. Barricarte A. Ardanaz E. Amiano P. Tormo MJ. Gonzalez CA.

Title

Changes in smoking habits in adults: Results from a prospective study in Spain

Source

Annals of Epidemiology. 14(4):235-243, 2004 Apr.

Abstract

PURPOSE: We assessed changes in smoking behavior and its related factors among healthy adults from five regions in Spain.

METHODS: The smoking status at recruitment and after 3 years was compared in 14,288 men and 23,983 women aged 35 to 64 years. The pattern of smoking and several lifestyle factors were

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investigated as potential predictors of subsequent changes in smoking habits.

RESULTS: Among current smokers at baseline the age-adjusted rates of cessation per 1000 person-years were 57.4 for men and 43.2 for women. Among former smokers at baseline the relapse rates were 37.6 and 48.8 per 1000 person-years for men and women, respectively. The initiation rate per 1000 person-years among men who had never smoked was 12.5 and 2.7 for women. Higher amount Currently smoked and longer time since quitting were strong predictors of lower rates of cessation and relapse, respectively, while age was associated with lower initiation rates in women. Increased alcohol consumption was related to low cessation and high relapse and initiation rates, mainly among men, while more educated women had higher cessation and initiation rates.

CONCLUSIONS: The current pattern of changes in smoking behavior in Spanish Populations aged 35 to 64 years results in rather small prevalence reduction. Additional efforts should be made to promote successful cessation and prevent initiation to reduce the tobacco burden in Spain. (C) 2003 Elsevier Inc. All rights reserved. [References: 32]

Publication Type

Article

Citation 87.

Authors

Kumari M. Seeman T. Marmot M.

Title

Biological predictors of change in functioning in the Whitehall II study

Source

Annals of Epidemiology. 14(4):250-257, 2004 Apr.

Abstract

PURPOSE: To examine whether risk factors for CHD are related to change in functioning independent of the presence or development of disease.

METHODS: Longitudinal follow up of 4768 men and 2034 women civil servants from 20 London-based departments with complete data for the SF-36, biological variables, and BMI and health related behaviors. Data are used from two phases of the Whitehall II study, phase 3 (1991-1993) and phase 4 (1995) with an interval of 36 months. Weight, height, fasting insulin, 2-hour post load glucose, total and HDL-cholesterol, fibrinogen, von Willebrand factor, diastolic and systolic blood pressure, and waist hip ratio were measured at phase 3. Demographic and socio-economic information, health related behaviors, and the SF-36 were obtained at both phases by questionnaire.

RESULTS: Waist hip ratio, fasting insulin, triglycerides, and HDL-cholesterol were associated with a decline in physical functioning in the total cohort and when those with poor health at baseline were removed from the analyses. Principal component analysis revealed that these variables clustered with total cholesterol and may represent insulin resistance. The biological variables had a cumulative effect on decline in physical functioning such that those with poor waist tip ratio, fasting insulin, triglycerides, and HDL-cholesterol was two times greater than those without. This relationship was independent of exercise, smoking, and alcohol intake which explained only 17% and 5.4% of the association in men and women, respectively.

CONCLUSIONS: A number of biological variables, which may represent insulin resistance, are associated with decline in physical functioning in men and women independent of prevalent ill

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health or health related behaviors. (C) 2004 Elsevier Inc. All rights reserved. [References: 29]

Publication Type
Article

Citation 88.

Authors

Wilsgaard T. Arnesen E.

Title

Change in serum lipids and body mass index by age, sex, and smoking status: The Tronso Study 1986-1995

Source

Annals of Epidemiology. 14(4):265-273, 2004 Apr.

Abstract

PURPOSE: The steady increase in body weight is becoming a major health problem in western societies. How body weight increase influences established disease risk factors is the focus of our study.

METHODS: We assessed the association between 8-year change in body weight and serum lipids in a population-based Study comprising 15,624 men and women aged 20 to 61 years at baseline in 1986. Comparisons between different strata of age, sex, initial weight, and categories of smoking status change were also addressed.

RESULTS: Significant associations between body mass index (BMI) change and change in high density lipoprotein (HDL) cholesterol, total cholesterol, and triglycerides were observed in all 10-year age groups both in men and women. The weakest associations were observed in persons older than 50 years of age and the associations were also weaker in women than in men. In quartile groups of baseline BMI, a significant linear trend was observed for HDL cholesterol in men and for total cholesterol in both men and women. The associations were less adverse for persons in a higher quartile group of baseline BMI. The association between BMI change and serum lipid change was strongest for persons who were consistent smokers or non-smokers at each Survey.

CONCLUSIONS: We conclude that an increase in BMI has been shown to be associated with adverse changes in serum lipids. The associations were weaker in women than in men. (C) 2004 Elsevier Inc. All rights reserved. [References: 40]

Publication Type
Article

Citation 89.

Authors

Gentile D. Howe-Adams J. Trecki J. Patel A. Angelini B. Skoner D.

Title

Association between environmental tobacco smoke and diminished dendritic cell interleukin 10 production during infancy

Source

Annals of Allergy, Asthma, & Immunology. 92(4):433-437, 2004 Apr.

Abstract

Background: Diminished interleukin 10 (IL-10) production has been documented in children and adults with asthma and atopy. Environmental tobacco smoke (ETS) is recognized as a risk factor

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for the development of childhood asthma.

Objective: To determine whether there is an association between ETS and dendritic cell (DC) IL-10 production during infancy.

Methods: ETS was evaluated by questionnaire, and blood samples were obtained at 2 weeks, 3 months, and 5 months of age in 37 healthy infants. DCs were cultured and stimulated, and supernatants were assayed for IL-10 by enzyme immunoassay.

Results: Sixteen infants had no history of exposure to ETS, and 21 infants had a history of ETS exposure. The frequency of subjects with detectable IL-10 levels was similar in both groups at 2 weeks and 3 months but significantly different at 5 months ($P < .001$). In those without ETS exposure, the frequency with detectable IL-10 levels increased during the observation period (25% at 2 weeks, 20% at 3 months, and 36% at 5 months; $P = .03$ vs 2 weeks). In contrast, in those with ETS exposure, the frequency with detectable IL-10 levels decreased during the observation period (33% at 2 weeks, 19% at 3 months; $P = .02$ vs 2 weeks; and 7% at 5 months; $P < .001$ vs 2 weeks).

Conclusions: Our study results demonstrate an association between ETS and diminished DC IL-10 production during infancy. Future studies need to expand on these sample sizes and explore whether diminished DC IL-10 production is the mechanism by which ETS predisposes patients to the development of asthma and/or atopy. [References: 40]

Publication Type
Article

Citation 90.

Authors

Konishi T. Calvillo M. Leng AS. Lin KM. Wan YJY.

Title

Polymorphisms of the dopamine D-2 receptor, serotonin transporter, and GABA(A) receptor beta(3) subunit genes and alcoholism in Mexican-Americans

Source

Alcohol. 32(1):45-52, 2004 Jan.

Abstract

The etiology of alcohol dependence is a complex interaction of psychosocial and biologic factors. To study the impact of genetic factors that play an important role in an individual's vulnerability to alcohol abuse and dependence, we examined the genetic variations of the major neurotransmitter genes, including the dopamine D2 receptor (DRD2) Taq1 A, B, and -141C insertion/deletion (Ins/Del) polymorphisms, the serotonin transporter-linked polymorphic region (5-HTTLPR), and the gamma-aminobutyric acid A (GABA(A)) receptor beta(3) subunit gene (GABRBeta3), for 130 Mexican-American alcoholic men and 251 nonalcoholic control subjects (105 men and 146 women). The genotype frequency for the DRD2 -141C Ins/Del allele was significantly different between alcoholic and control subjects ($P = .007$). The frequency of the 5-HTTLPR short (S) allele was significantly higher in alcoholic individuals (61.5%) than in nonalcoholic control subjects (52.8%; $P = .021$). When smokers were excluded from both control and alcoholic groups, the association between the DRD2 -141C Ins allele, as well as between the 5-HTTLPR S allele, and alcoholism became significant at both genotypic and allelic levels. No positive association was found between alcoholism and the DRD2 Taq1 A or B, or the GABRBeta3, genotype. Our findings indicate that the DRD2 -141C Ins allele and the 5-HTTLPR S allele are genetic risk factors for alcoholism in Mexican-Americans, and that smoking

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modulates the association between genetic risk factors and alcoholism. (C) 2004 Elsevier Inc. All rights reserved. [References: 70]

Publication Type
Article

Citation 91.

Authors

Karam GA, Reisi M, Kaseb AA, Khaksari M, Mohammadi A, Mahmoodi M.

Title

Effects of opium addiction on some serum factors in addicts with non-insulin-dependent diabetes mellitus

Source

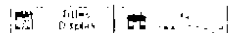
Addiction Biology. 9(1):53-58, 2004 Mar.

Abstract

The aim of this study was to determine the effect of opium on biochemical parameters in addicts with non-insulin-dependent diabetes mellitus (NIDDM). Twenty-three males and 26 females between 35 and 65 years of age, with NIDDM, addicted to opium, were selected as the case group. Twenty-three males and 26 females with NIDDM and no opium addiction served as controls. Fasting glucose, glycated haemoglobin (HbA1c), total cholesterol, high density lipoproteins-cholesterol (HDL-c), triglycerides (TGs), sodium (Na⁺), potassium (K⁺), calcium (Ca²⁺), iron (Fe²⁺), total iron binding capacity (TIBC), serum total protein, albumin, alanine aminotransferase (ALT), aspartate aminotransferase (AST), uric acid and urica were measured in the serum of the two groups. Serum protein electrophoresis was also carried out. Compared to the control group, in addicted males with NIDDM, HbA1c, K⁺ and Fe²⁺ were higher, and serum total protein, ALT and HDL-c were lower. No significant difference was observed between other factors. Albumin was lower in addicts, but no significant difference was observed between the albumin/globulin ratios. In addicted females with NIDDM, serum total protein, TIBC, ALT and AST were lower compared to non-addicts. Cholesterol tends to be lower in diabetic addicted males, HbA1c in addicted females and uric acid in addicted males was higher compared to non-addicted diabetics. Their differences, however, were not significant. According to our results, smoking opium increases serum glucose and decreases HDL-c, and thus adds to metabolic disorders in NIDDM patients. It also increases potassium and Fe²⁺ in males and decreases TIBC in females, and could therefore potentially interfere with water and iron metabolism.

[References: 32]

Publication Type
Article



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Version: ref9.1.0, SourceID 1.9087.1.155